

FEATURES

1. THX Surround EX and THX Ultra2 certified
2. Dolby Digital, Dolby Digital EX and Dolby Pro Logic IIx decoder
3. DTS, DTS-ES, DTS 96/24, DTS Neo:6 and DTS Neo:6 96 decoder
4. MPEG-2 AAC decoder (UJJ)
5. Dolby Headphone and Dolby Virtual Speaker
6. Sound Field Processor by Dual 32 bit TI Aureus™ DSP
7. Dual decode function including Dolby Virtual Speaker for Zone2 output
8. IEEE1394 digital audio interface for SACD/DVD-Audio (option : DTR, ~~DTX~~)
9. HDMI (High-Definition Multimedia Interface) 2-Inputs and 1-Output (option : DTR, ~~DTX~~)
10. MP3, WMA and WAV decode for listening to Internet Radio and Music Server by Net-Tune (option : DTR, ~~DTX~~)
11. 7ch equal power: 150 Watts per channel into 8 ohms (FTC)
12. BTL for Front L/R with Surround Back channel amplifier: 280 Watts per channel into 8 ohms (FTC)
13. Bi-Wiring for Front L/R with Surround Back channel amplifier
14. Parallel push-pull discrete output stage for high current output capability and 4 ohms driven
15. 2-192kHz/24bit 2ch ADC using $\Delta\Sigma$ conversion (Asahikasei AK5385) for Main and Zone2.
16. 2-96kHz/24bit 4ch ADC using $\Delta\Sigma$ conversion (Asahikasei AK5384) for Multichannel inputs.
17. 5-192kHz/24bit 2ch DAC $\Delta\Sigma$ conversion (Wolfson WM8719) for 7.1ch using.
18. 2-192kHz/24bit 2ch DAC $\Delta\Sigma$ conversion (Wolfson WM8716) for Rec and Zone2 outputs.
19. Vector Linear Shaping Circuitry for all channels
20. Adjustable Crossover individually for Front L/R, Center, Surround L/R, Surround Back L/R and LFE [40-150 Hz, 10 Hz step]
21. Fine tuning for distance setup [0.1 ft, 0.03 m step]
22. Slot based construction for future upgraded
23. Phono (MM) Input
24. Assignable 9-Inputs and 5-Outputs Audio L/R terminals (not included Front Video 7)
25. Assignable 6-Inputs and 4-Outputs Composite Video
26. Assignable 6-Inputs and 4-Outputs S-Video
27. Assignable 3-Inputs and 1-Output RCA Component Video (other than TX-NR1000 UDC), 4-Inputs and 2-Outputs (TX-NR1000 UDC)
28. Assignable 1-Input and 1-Output BNC Component Video (other than TX-NR1000 UDC)
29. Assignable 2-Inputs and 1-Output D4 Video (UJJ)
30. Video up-converter from Composite Video to S-Video and S-Video to Component Video by using 5-Line adaptive comb filters and Adaptive digital line length tracking (ADLLT™)
31. Video up converter from analog Video (up to 480p) to HDMI
32. Video down converter from Component Video to S-Video for Monitor out (480i only), (option : DTR, ~~DTX~~)
33. Video down converter from S-Video to Composite Video for Monitor out and Zone 2 Video out
34. Dual Monitor out available for Composite Video and S-Video
35. Independent inputs and outputs of Component RCA, BNC and D4 terminals (UJJ)
36. Color coded RCA pin jacks for Multichannel Input [Front L/C/R, Surround L/R, Surround Back L/R, Subwoofer] (option : DTR-10.5 UDD)
37. Assignable 6-Optical and 6-Coaxial digital inputs and Front Optical input
38. Assignable 2-Optical and 2-Coaxial outputs for Rec out, Zone 2 and Zone 3
39. Front Panel Video 7 Audio and Video inputs with Optical digital input
40. Zone 2 and Zone 3 audio output are available fixed or variable.
41. Available Zone 2 and Zone 3 Composite Video out
42. Zone 2 OSD function independent of Monitor out OSD function (UDD, UDC, UJJ: NTSC format, Other: NTSC/PAL format compatible)
43. Rec selector [audio and video]
44. Tape Dubbing and Video Dubbing
45. 3-band Bass/Mid/Treble Tone control individually for Front L/R, Center, Surround L/R, Surround Back L/R and Subwoofer (Bass only)
46. Notch filter for boom bass reproduction
47. Color coded RCA pin jacks for Pre-out A [Front L/C/R, Surround L/R, Surround Back L/R or Zone 2 L/R, Subwoofer]
48. Subwoofer Pre-out B
49. Color coded and transparent Heavy Duty Speaker Terminals and Dual Banana capability for Speaker A/B flexible configuration
50. FM/AM random 40 Station Preset Tuning
51. Internet Radio random 30 Station Preset Tuning (option : DTR, ~~DTX~~)
52. Character input [Tuner preset, Input selector]
53. FM Automatic Scan Tuning
54. Battery-Free Backup System To Protect Memory Contents
55. AM Loop Antenna (option : ~~DTX~~)
56. Fluorescent Display with Dimmer Control (4 mode)
57. New design HTC Remote Control (UGR, UDT, UGT, UGK, UJJ, UPP-RC)
58. New design HTC Remote Control with RF wireless operation (UDD, UDC, UPA, UPP-RF)
59. The remote ID function for independent control to plurality of AV Receiver
60. Audio muting, Sleep Timer [operable via Remote Control]
61. Handsome Solid Aluminum Front Panel
62. Front pocket door to hide away unusual use control buttons
63. Dual speed dual cooling fan via output level and/or temperature
64. IntelliVolume operation
65. Non Scaling Configuration
66. Wide Range Power Amplifiers 5 Hz - 100 kHz
67. Assignable 5-12V trigger output terminals
68. 3-IR in/out terminals for Main, Zone 2 and Zone 3 (TX, ~~DTX~~)
69. Phoenix connector for 5-12V trigger output and 3-IR input for Custom Installation usage (DTR)
70. RS-232 port for control
71. IEC type AC-Inlet, Detachable Power cord
72. Linear Optimum Gain Volume Circuitry [0.5dB step]
73. H.C.P.S. High current power supply toroidal transformer
74. Aluminum side panel
75. Brazen feet
76. e-control available
77. PC setup application available

Aureus is a trademark of Texas Instruments.

ADLLT is a trademark of Analog Devices, Inc.

FEATURES

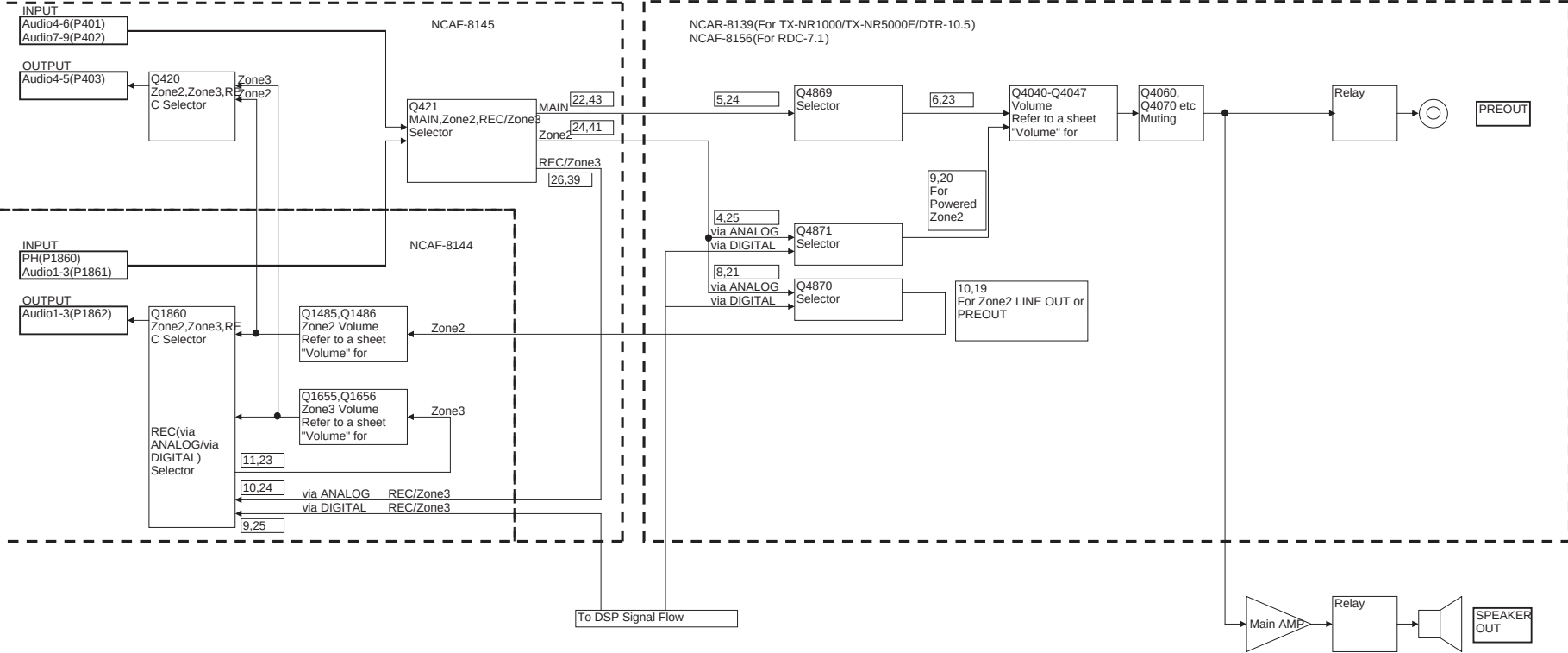
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6. Apogee master clock
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26. Assignable 3-Inputs and 1-Output RCA Component Video (option for UDD, UJJ)
27. Assignable 1-Input and 1-Output BNC Component Video (option for UDD, UJJ)
28. Assignable 2-Inputs and 1-Output D4 Video (option for UJJ)
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35. Color coded RCA pin jacks for Multichannel Input [Front L/C/R, Surround L/R, Surround Back L/R, Subwoofer] (option for UDD)
36. Assignable 1-AES / EBU (option for UDD), 6-Optical and 6-Coaxial digital inputs
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44. Notch filter for boom bass reproduction
45. Balanced 7.1 channel Preout for noise free signal transmission
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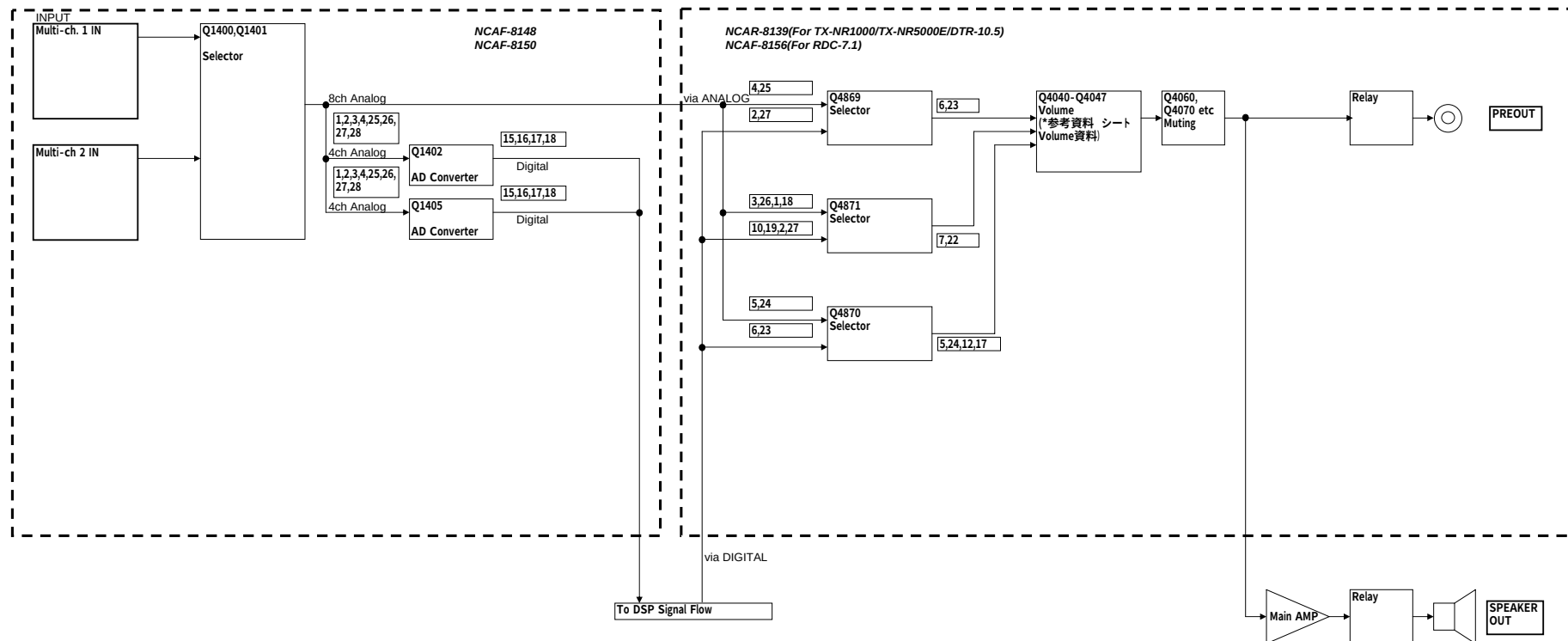
FLOW CHART
Analog 2 channels

Flowchart when a signal does not pass through DSP circuit
Analog 2 ch. input



How to check: After all speaker setting is set "Yes" and Audio Selector is set "Analog", the unit is set "DIRECT".
How to clear: Hold down "CD" button and then press "STANDBY/ON" button. •

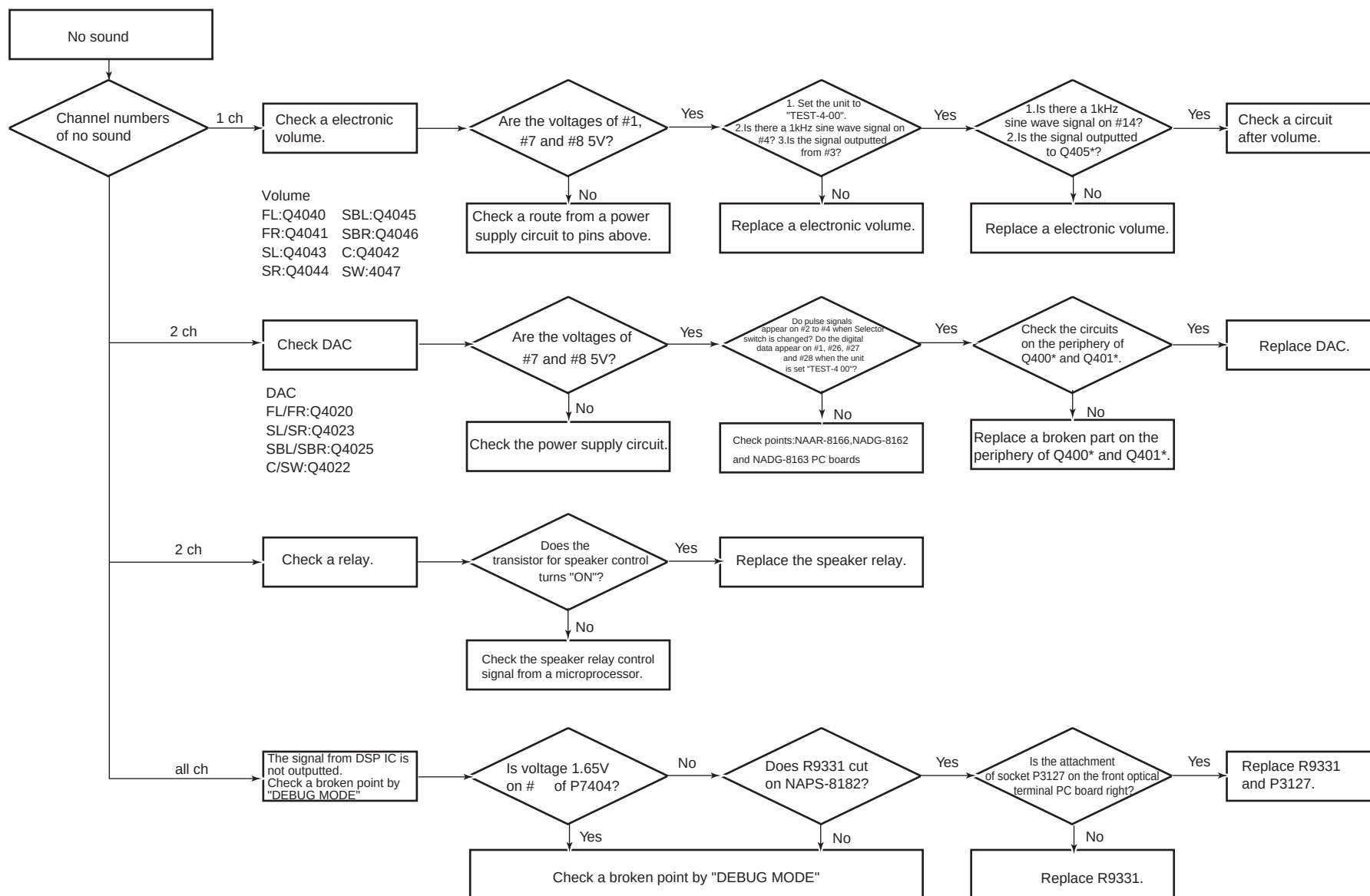
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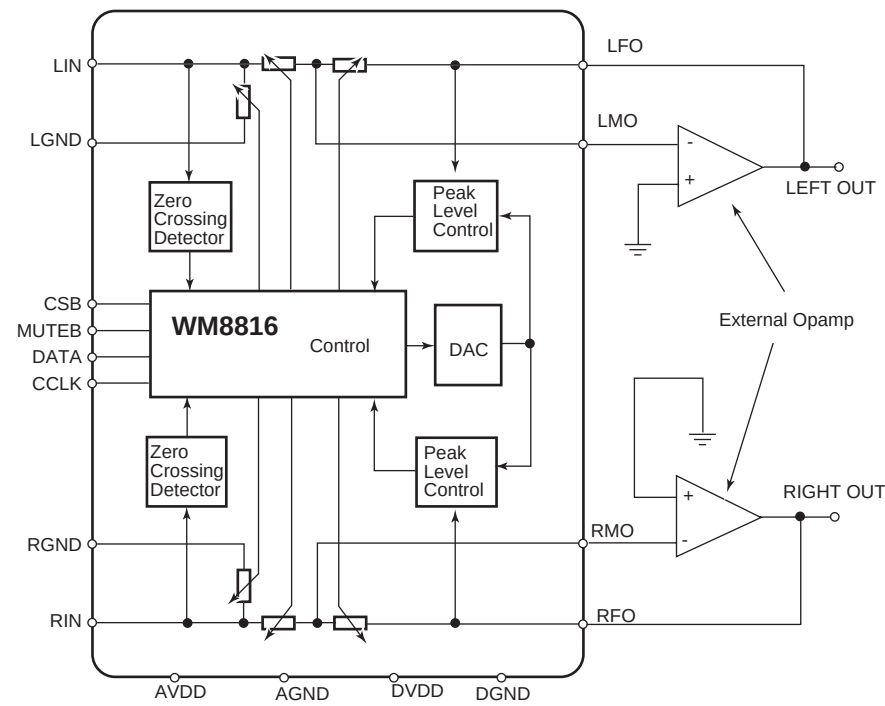
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TROUBLE SHOOTING

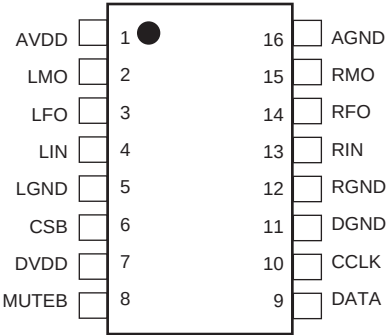


WM8816(Stereo Digital Volume Control)

BLOCK DIAGRAM



PIN CONFIGURATION

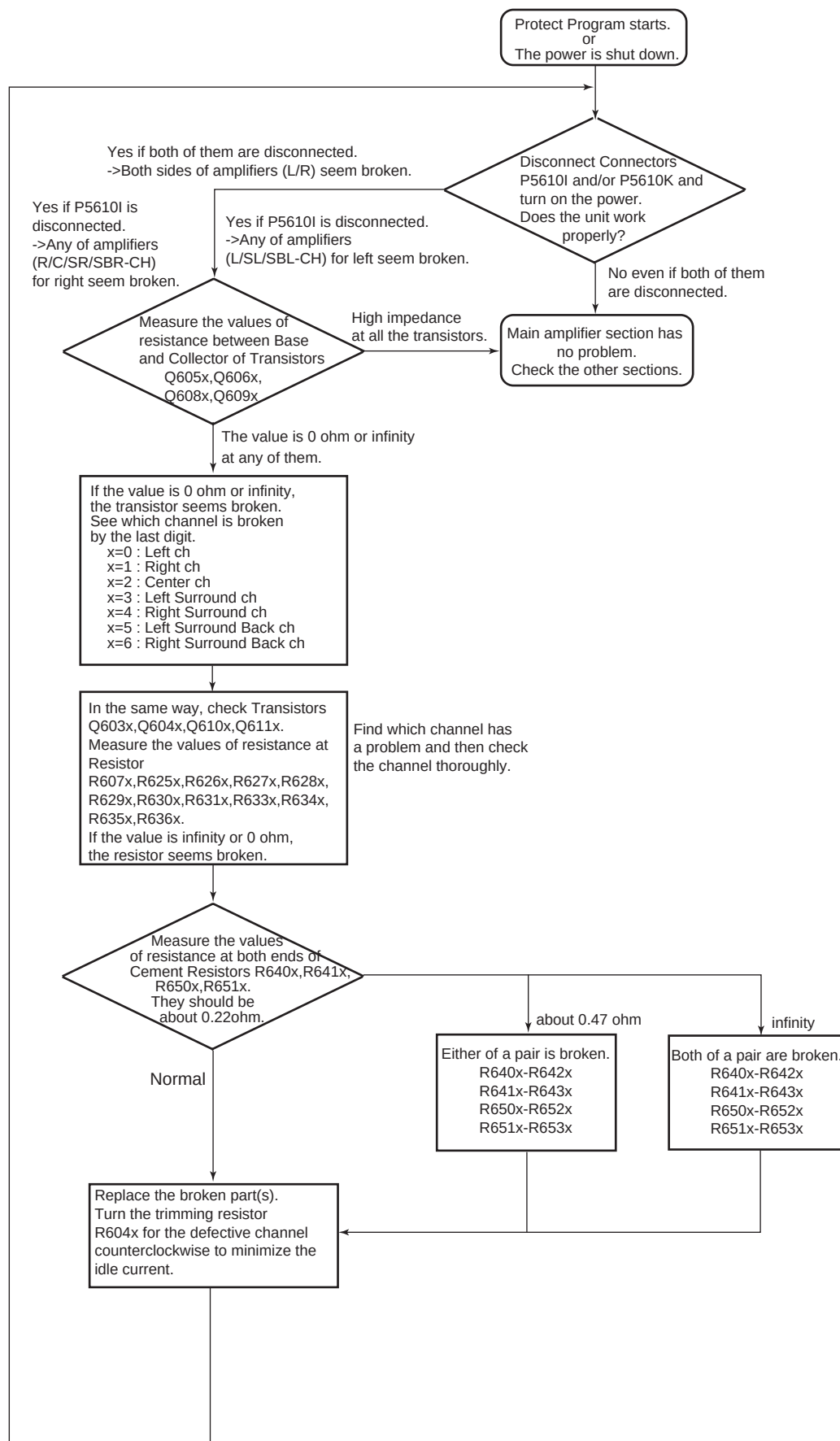


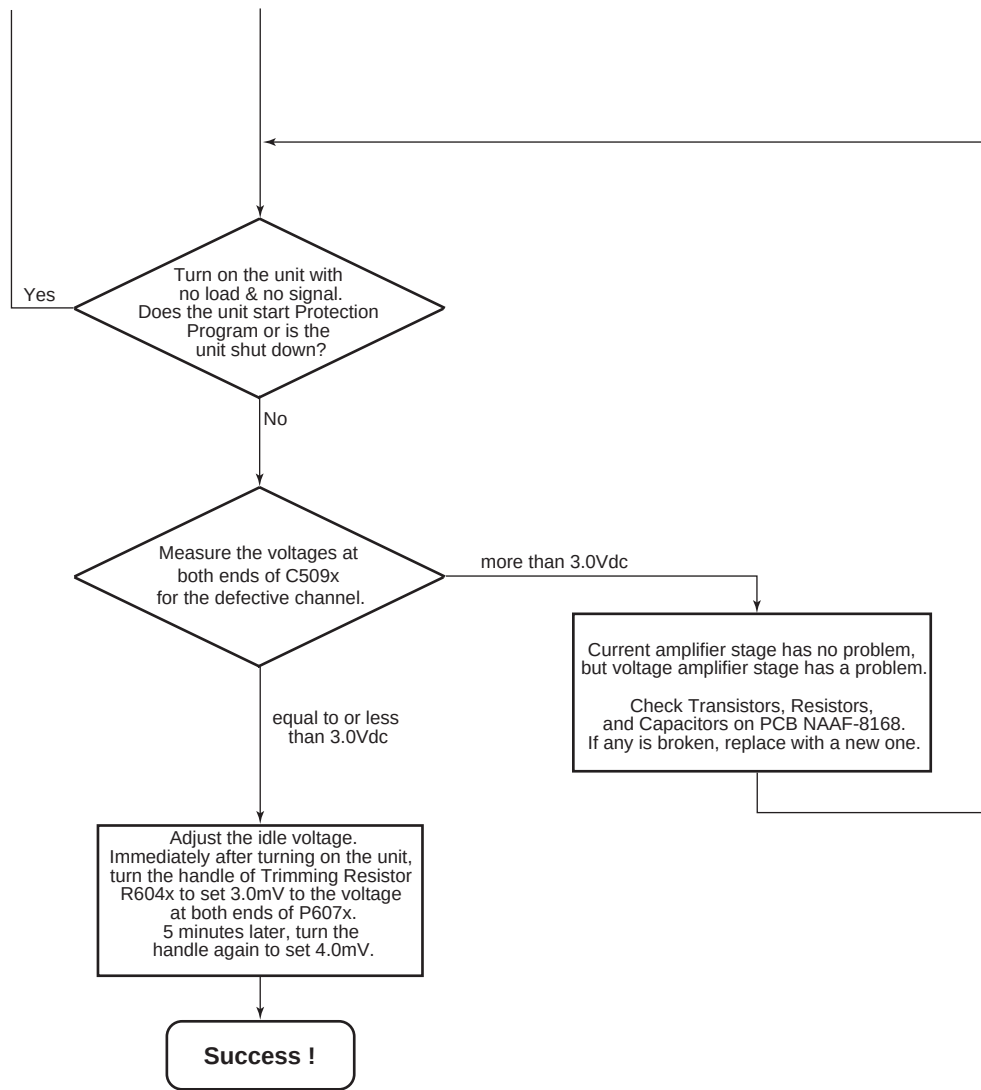
PIN DESCRIPTION

PIN	NAME	TYPE	DESCRIPTION
1	AVDD	Supply	Supply voltage for Analogue Circuitry
2	LMO	Analogue output	External Op-amp Inverting Input (Left channel)
3	LFO	Analogue input	External Op-amp Feedback Signal (Left channel)
4	LIN	Analogue input	Input Signal (Left Channel)
5	LGND	Analogue input	Input Signal Ground (Left Channel)
6	CSB	Digital input	Chip Select (active low)
7	DVDD	Supply	Supply Voltage for Digital Circuitry
8	MUTEb	Digital input	Mute (active low)
9	DATA	Digital In/Out	Serial Interface Data Input/Output (tri-state)
10	CCLK	Digital input	Serial Interface Clock
11	DGND	Supply	Digital Ground
12	RGND	Analogue input	Input Signal Ground (Left Channel)
13	RIN	Analogue input	Input Signal (Left Channel)
14	RFO	Analogue input	External Op-amp Feedback Signal (Left channel)
15	RMO	Analogue output	External Op-amp Inverting Input (Left channel)
16	AGND	Supply	Analogue Ground

TROUBLE SHOOTING

How to repair the Main amp of TX-NR1000/NR5000E/DTR-10.5



TROUBLE SHOOTING***How to repair the Main amp of TX-NR1000/NR5000E/DTR-10.5***

2004 ONKYO Service Seminar

How to check Voltage Protection Program

- a: Turn on the unit, hold "CD" button down and then press "STANDBY/ON" button.
Make sure that the front display shows "Test-1".
- b: Press "VIDEO4" button and see "Test-4 00" on the front display.
- c: Press and release "Zone2" button repeatedly until "Test-4 27" is shown on the front display.
- d: See the unit automatically check each channel.

During the check, the message on the display is changing as follows:

Channel	1st Message	2nd Message
Left	Test-4 27	Protect OK
Right	Test-4 28	Protect OK
Left Surround	Test-4 29	Protect OK
Right Surround	Test-4 30	Protect OK
Left Surround Back	Test-4 31	Protect OK
Right Surround Back	Test-4 32	Protect OK
Center	Test-4 33	Protect OK

- e: Make sure that the display stops at "Test-4 34".
If this check stops before Test-4 34, do it again from "Test-4 27".
To move to the previous step, press "REC/ZONE3" key.
To move to the next step, press "ZONE2" key.
- If the check stops at the same steps after some trials, the channel seems broken.
- f: To exit the program, press "STANDBY/ON" button and see "Clear" shown on the front display.
Make sure that the unit returns to the STANDBY mode later.

How to check the operation of Voltage Sensor

- a: Turn on the unit, hold "CD" button down and then press "STANDBY/ON" button, and see "Test-1" shown on the front display.
- b: Press "VIDEO4" button and see "Test-4 00" on the front display.
- c: Make sure that "FM STEREO" is shown in the bottom left area of the front display.

How to check the operation for Thermal Protection

- a: Turn on the unit, hold "CD" button down and then press "STANDBY/ON" button, and see "Test-1" shown on the front display.
- b: Press "VIDEO1" button and see "Test-1 00" on the front display.
- c: With no signal input, connect a 1.2 Kohm/1W resistor between the terminals +24V and TH2L of P6402 and between +24V and TH2
- d: Make sure that "MEMORY" is shown in the bottom left area of the front display.

How to check the operation of Cooling Fan -- Do all of the 3 checks.

- 0: Turn on the unit, hold "CD" button down and then press "STANDBY/ON" button, and see "Test-1" shown on the front display.

- 1-a: Press "VIDEO1" button and see "Test-1 00" shown.

Apply 1kHz -15dBV sine wave to Left channel in Multichannel input with no load.

- b: Make sure that the cooling fan starts running at a low speed several seconds later.
- c: Do the same for the other input terminals of R, C, SL, SR, SBL, SBR channels.

- 2-a: With no signal input, connect a 1.2 Kohm/1W resistor between the terminals +24V and TH1L of P6401 and between +24V and TH2L of P6402.

- b: Make sure that the cooling fan starts running at a high speed several seconds later.

- 3-a: With no signal input, connect a 1.2 Kohm/1W resistor between the terminals +24V and TH1R of P6401 and between +24V and TH2R of P6402.

- b: Make sure that the cooling fan starts running at a high speed several seconds later.

A

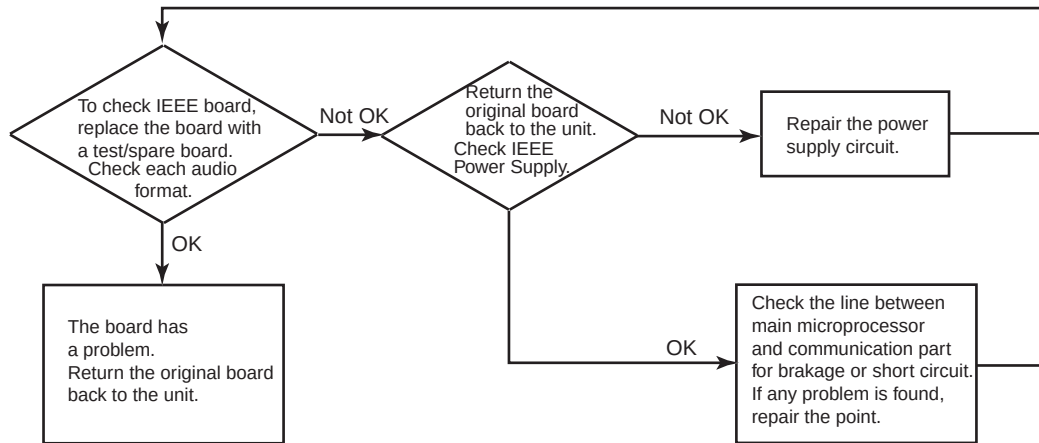
B

C

D

Service procedure for IEEE1394 board

1



2

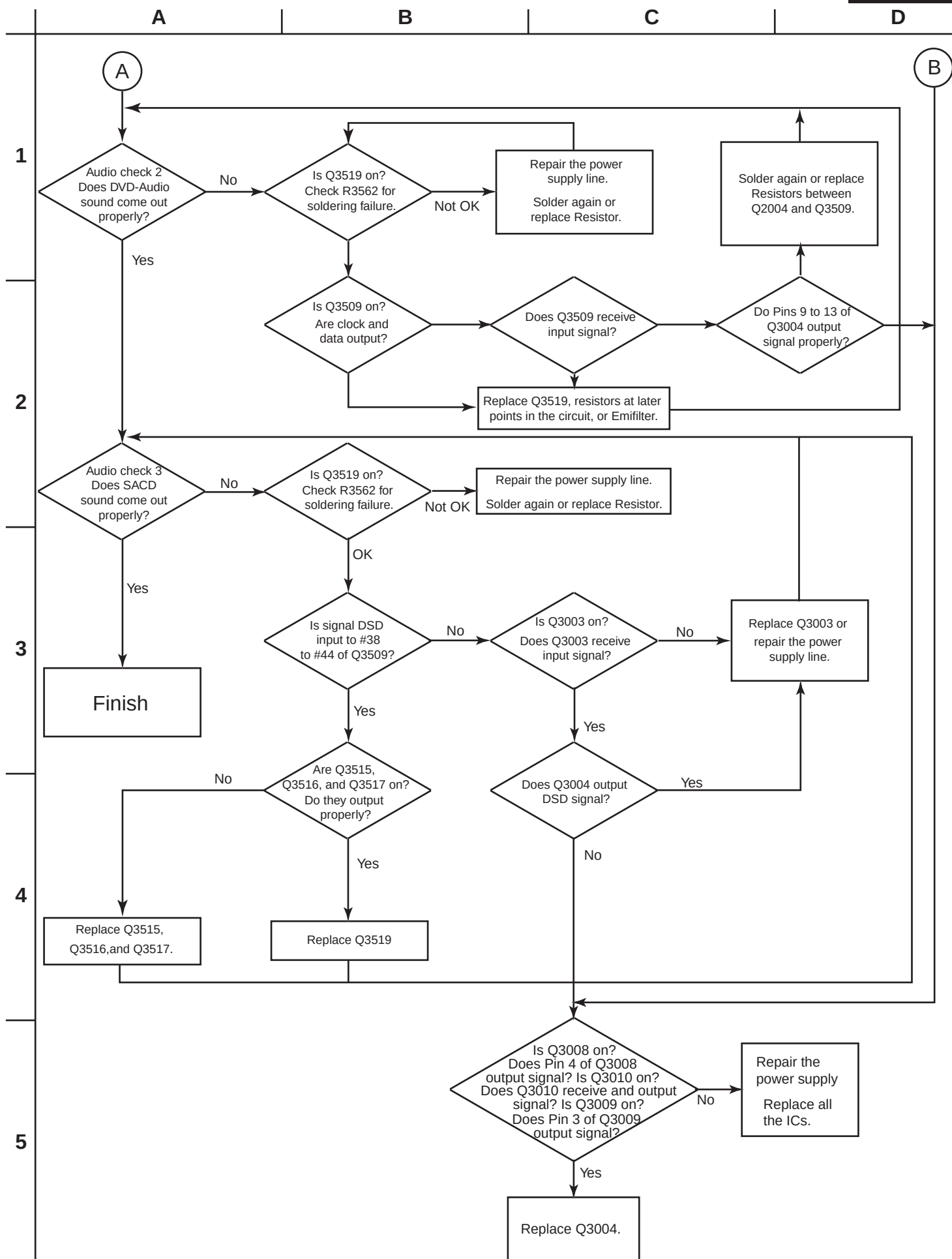
3

4

5

B

A



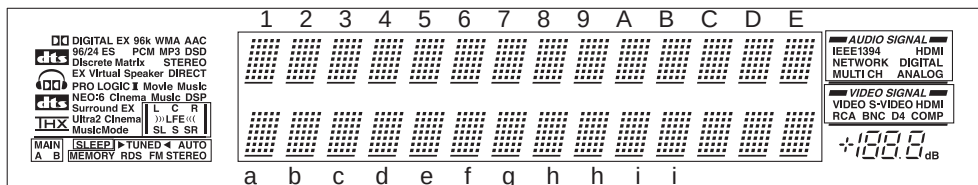
LINK ERROR TABLE

No.	Error	Details	How to respond to the error.
2	Connecting Error	Failed in connection.	Disconnect and Connect i.LINK cable.
3	Authentication Error	Failed in authentication.	Disconnect and connect i.LINK cable or turn off and on the power. If the error appears again, reload DTCP key.
4	Flash Access Error	Failed in access to Flash IC.	
5	Timeout Error	Failed in communication between SUB and ARM in time.	Turn off and on the power.
6	Stream Error	Received unusual stream.	Disconnect and Connect i.LINK cable.
7	Parameter Error	Parameter of command is incorrect.	
8	Hardware Error	Hardware Problem	Replace i.LINK board.
9	Undefined Command Error	Transmitted command does not have a proper command number.	
0A	Bus Reset in Process	In Bus Reset process, a command is transmitted.	Disconnect and Connect i.LINK cable.
0B	AVC Command Error	AVC command error reply.	
0C	ARM Start Error	ARM did not start.	Reload ARM firmware.
0D	SRM Update Error	Failed in SRM update.	
0E	Looping	Looping occurred.	Connect nodes without looping. If the error appears again, replace i.LINK board.
0F	Excessive Connections	More than 63 nodes are connected.	Decrease the number of connected nodes to 63 or less. If the error appears again, replace i.LINK board.
10	Excessive Hops	More than 16 hops were connected.	Decrease the number of hops to 16 or less. If the error appears again, replace i.LINK board.
11	Bus Occupied	No more stream cannot be carried on i.LINK bus.	Stop player etc. If the error appears again, turn off and on the power.
12	Other Error	A problem occurred.	No special operation is necessary. If the error appears again, replace i.LINK board.
13	Retry Error	Command Transmission was retried more than five times.	No special operation is necessary. If the error appears again, turn off and on the power.
14	Disconnection	When disconnected, a command was issued.	No special operation is necessary.
15	Firmware Update Error	Failed to update firmware.	
16	BOOT mode Error	In booting, a problem occurred.	Turn off and on the power. If the error appears again, replace i.LINK board.
17	Authentication in Process	In authentication process, a command was issued.	No special operation is necessary.

DEBUG MODE

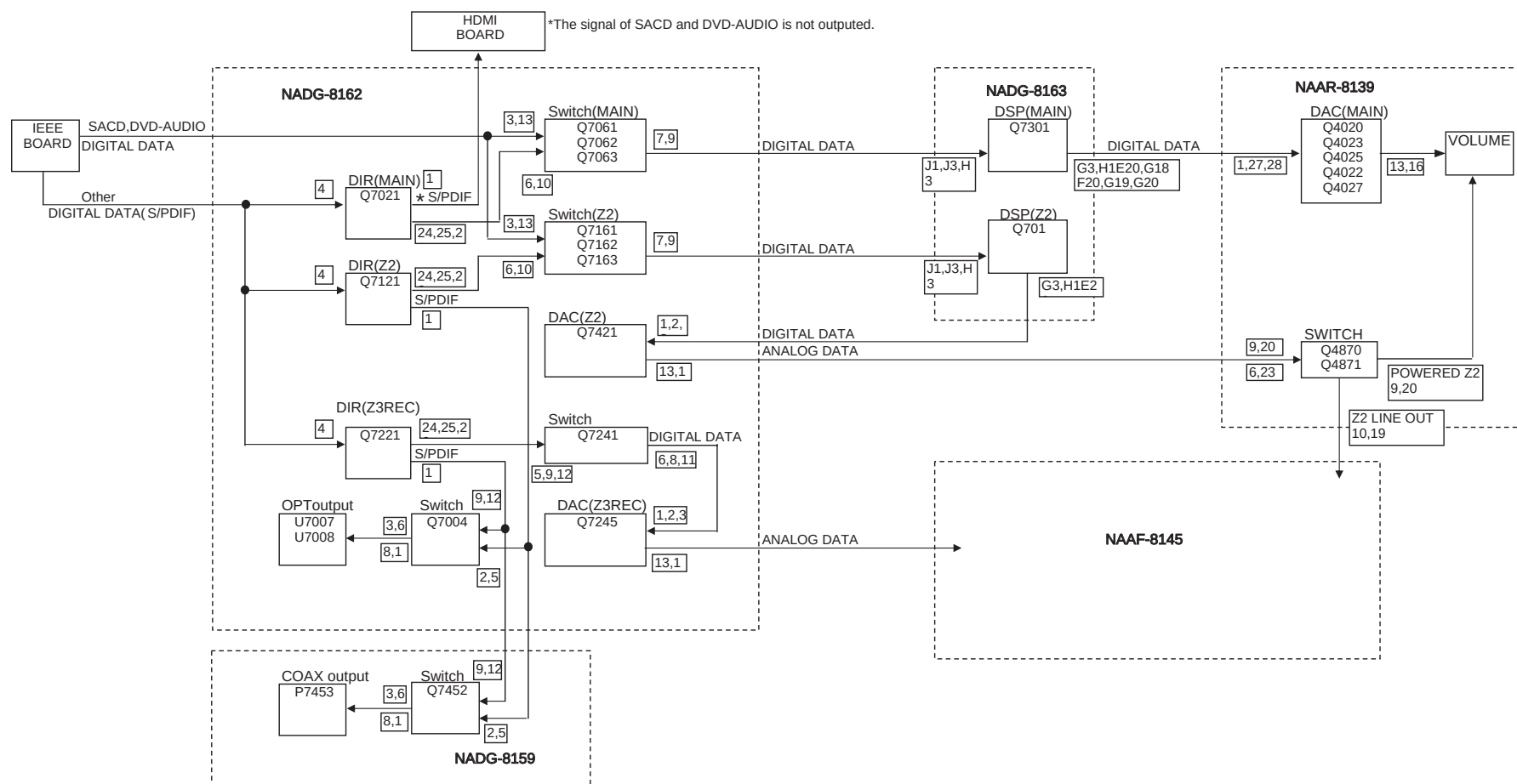
To enter Debug Mode, hold "DISPLAY" button down and then press "TAPE1" button.

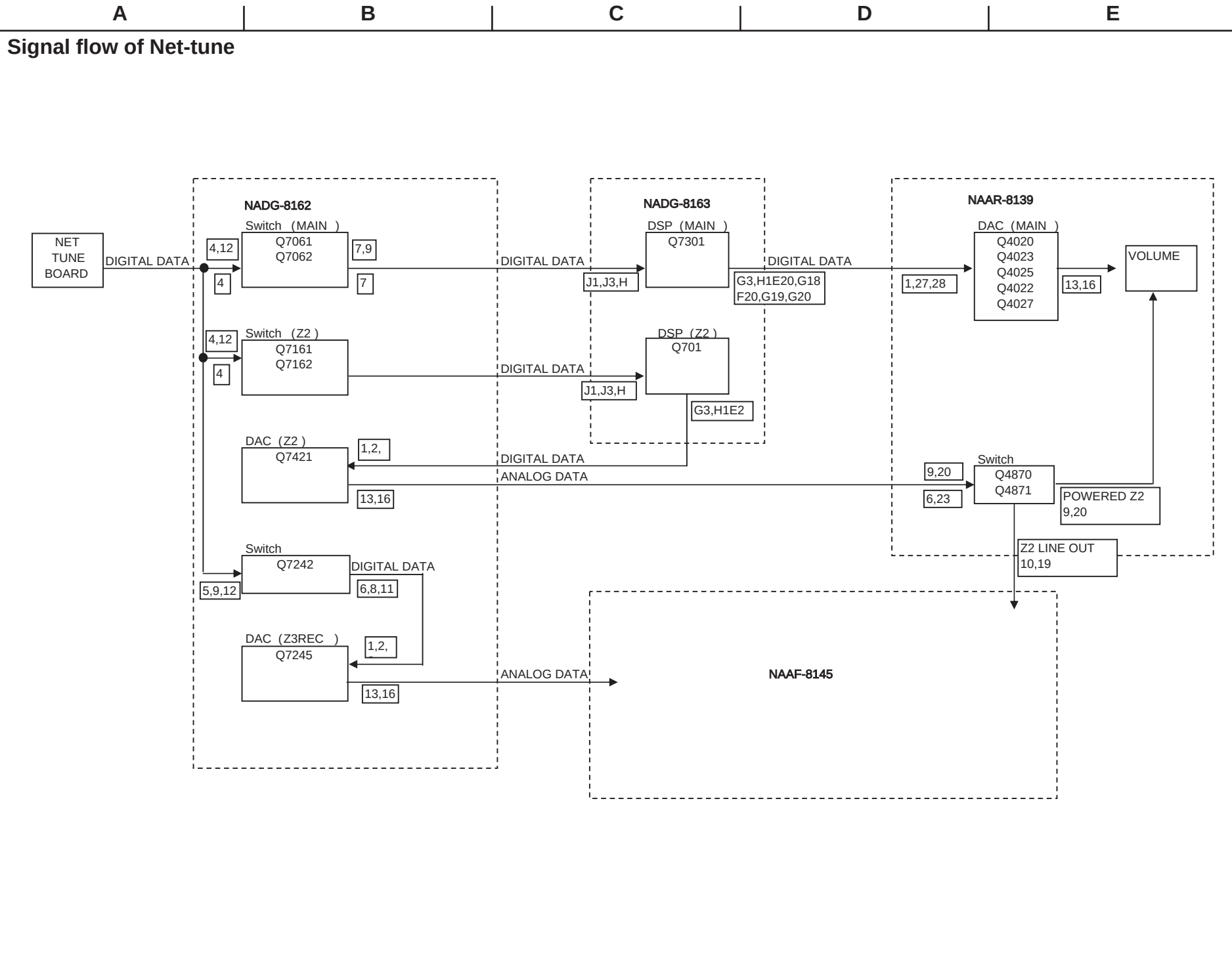
Front Display



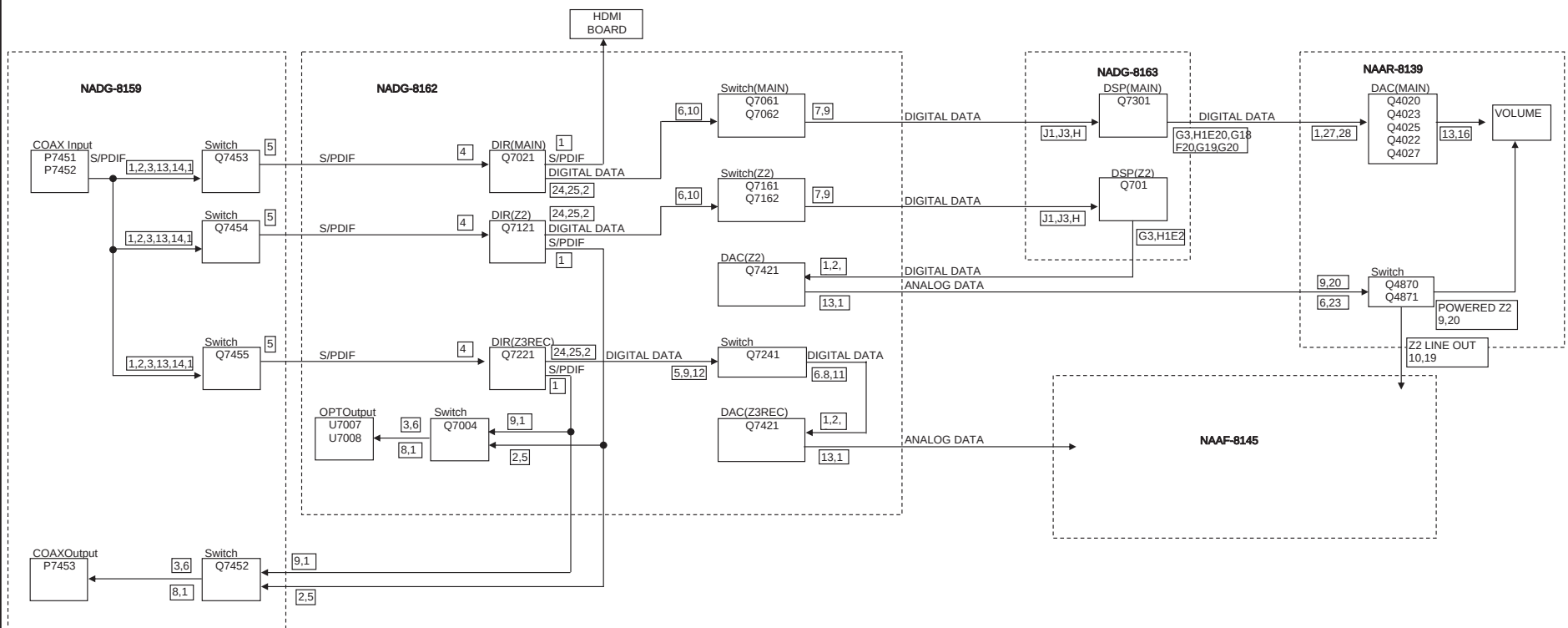
Position	Letter	Target	Status	
1	A/D	Q7021 DIR for Main Zone	A: Detects analog singal. D: Detects digital signal.	
2	A/D	Q7121 DIR for Zone2	A: Detects analog singal. D: Detects digital signal.	
3	A/D	Q7221 DIR for Zone3	A: Detects analog singal. D: Detects digital signal.	
4	H/L	Q7021 DIR for Main	H: Digital signal is unlocked. L: Digital signal is locked.	
5	H/L	Q7121 DIR for Z2	H: Digital signal is unlocked. L: Digital signal is locked.	
6	H/L	Q7221 DIR for Z3	H: Digital signal is unlocked. L: Digital signal is locked.	
7	H/L	Q7304 2nd PLL for DSP(MAIN)	H: PLL is locked. L: PLL is unlocked.	Unless PLL locks, the unit does not operate normally. Cause of unlock There is not clock LR on #1 of secondary PLL. There is clock LR, but many jitter components are contained. Check the power supply of second PLL. IC. Check the parts around second PLL IC.
8	H/L	Q7305 2nd PLL for DSP(Z2)	L: PLL is unlocked. H: PLL is locked.	
9	H/L	Q7244 2nd PLL for DAC(Z3Rec)	L: PLL is unlocked. H: PLL is locked.	
A	H/L	APG LOCK PORT Q4864	H: APG is locked. L: APG is unlocked.	
B	H/L	APG FS0 PORT #26 Q4864	H: High level L: Low level	
C	H/L	APG FS1 PORT #27 Q4864	H: High level L: Low level	
D	H/L	APG FS2 PORT #28 Q4864	H: High level L: Low level	
E	H/L	DSD/PCM PORT Not used		
a	F/C	Q7021 DIR for Main	F: Control finished C: Still controlling	All the digits are "F" when no problem.
b	F/C	Q7121 DIR for Z2	F: Control finished C: Still controlling	
c	F/C	Q7221 DIR for Z3	F: Control finished C: Still controlling	
d	F/C	Q7301 DSP for MAIN	F: Control finished C: Still controlling	Check whether the voltage of socket P7404 is 1.65V when there is a problem. Check points: R9331, P3127
e	F/C	Q701 DSP for Z2	F: Control finished C: Still controlling	
f	H/L	Q7301 DSP for MAIN	H: cannot decode L: has decoded successfully	
g	H/L	Q701 DSP for Z2	H: cannot decode L: has decoded successfully	All the digits are "L" when no problem.
hh	See Right	Q7301 DSP for MAIN	00/01: UNKNOWN status 08: PCM	
ii		Q701 DSP for Z2	0a: DD 0b/0e/0f/10/11: DTS 0c: AAC 0d: MPEg	

A |
Signal flow of IEEE input

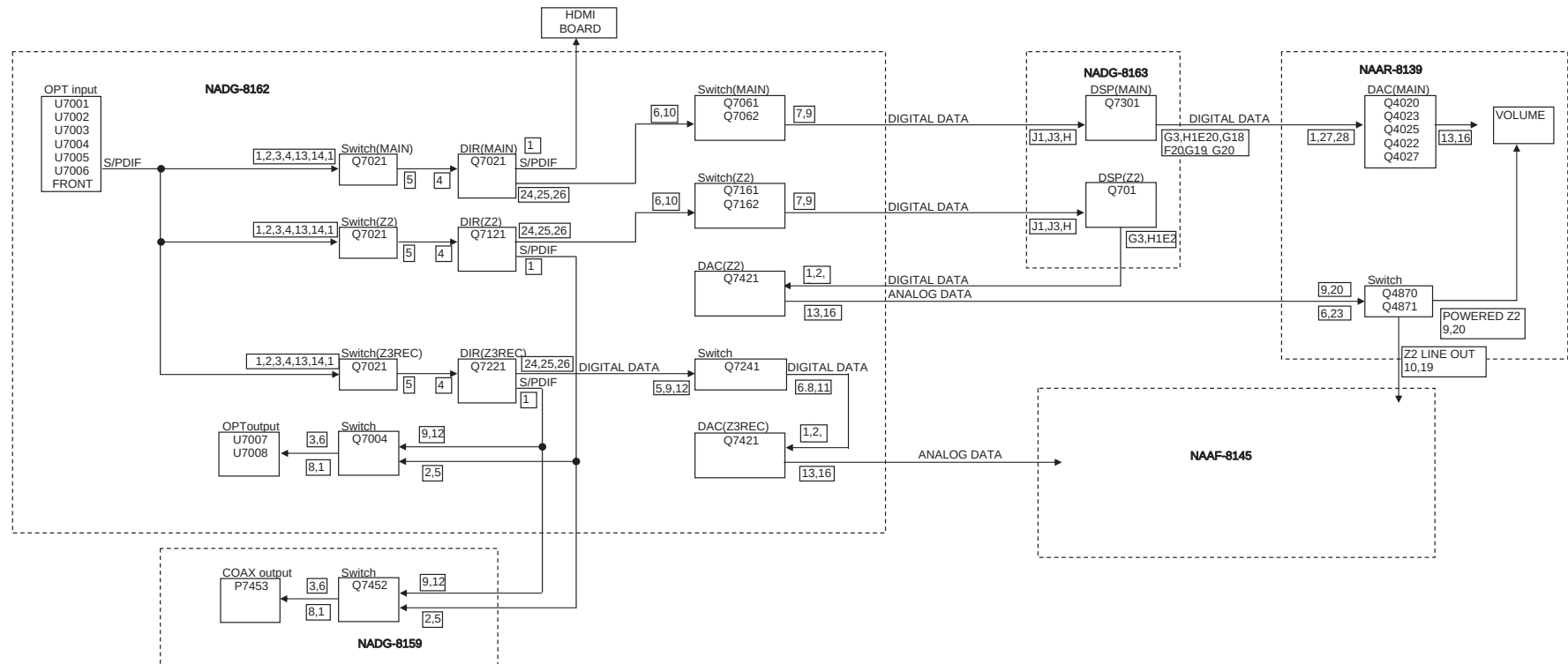




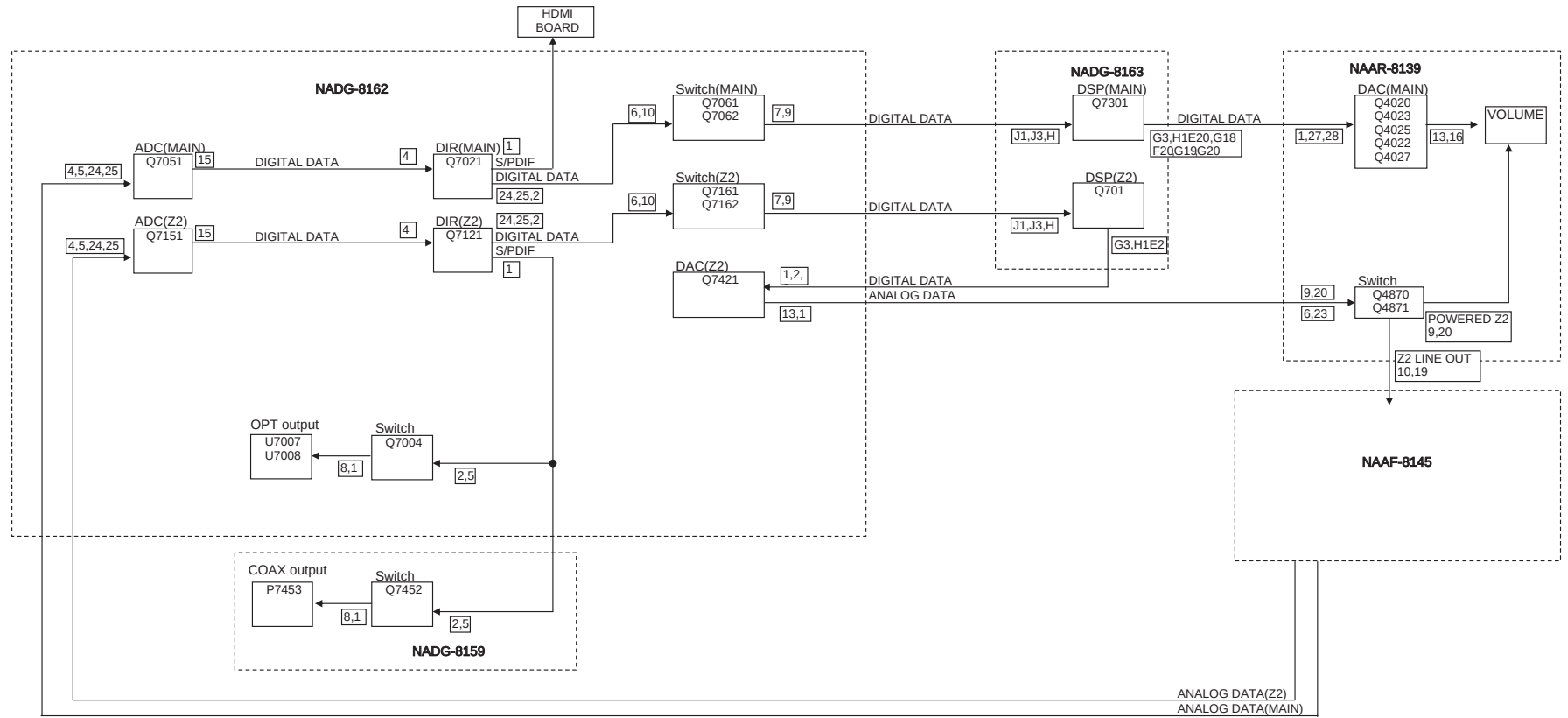
Signal flow of Coaxial input

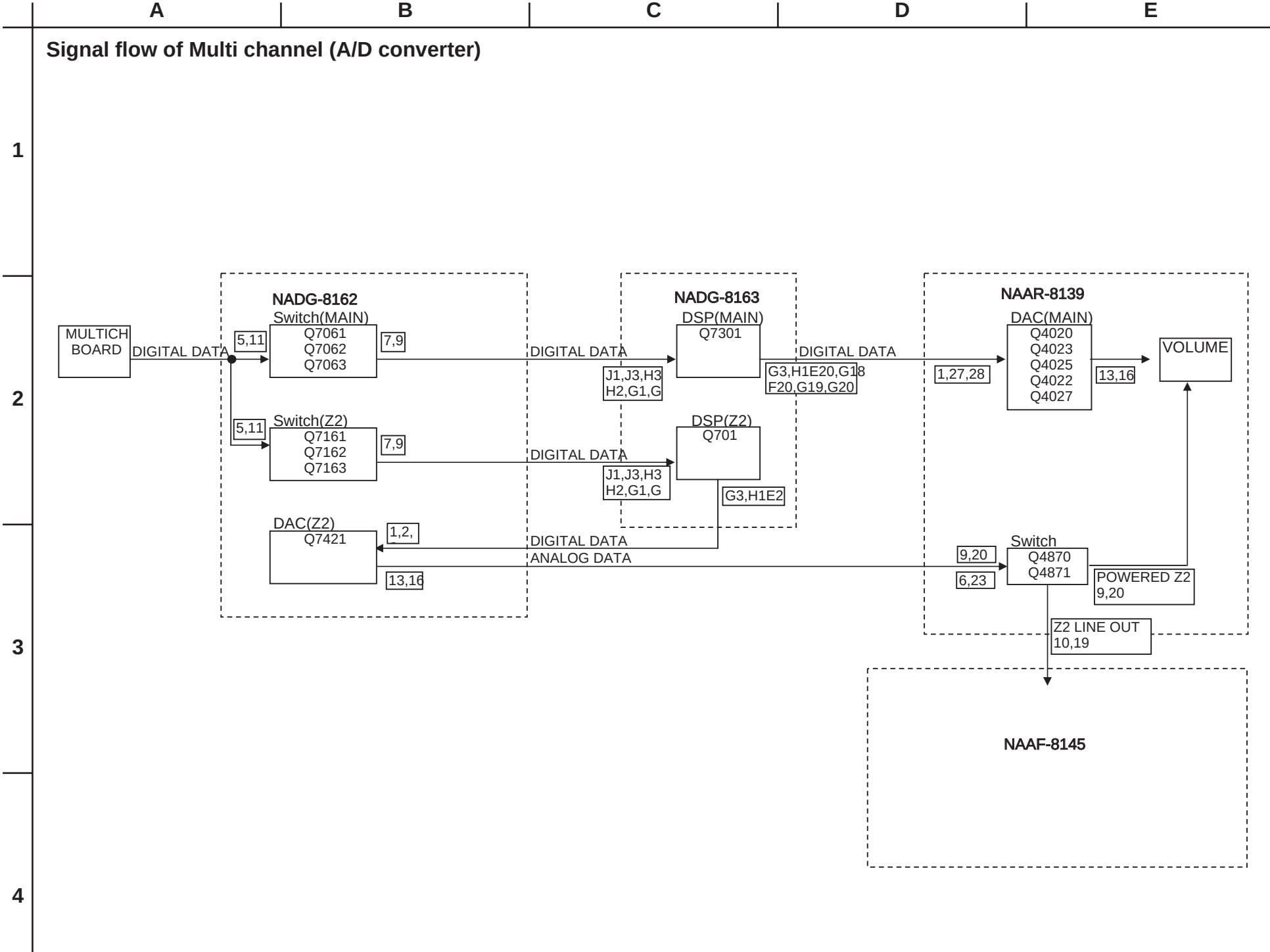


Signal flow of Optical input



Signal flow of Analog input (A/D converter)





Signal Flow (MAIN)

See a separate block diagram.

When COMPONENT IN4 is assigned, Composite, S video and HDMI's signals except Immediate picture and Component input 4 don't output to Component out 2.

When BNC IN is assigned, Composite, S video and HDMI's signals except Immediate picture and BNC IN don't output to BNC OUT.

When D4 input is assigned, Composite, S video and HDMI's signals except Immediate picture and D4 input don't output to D4 OUT.

CV-->CV		MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->Q2016-->To output
Y/C-->Y/C	Y channel	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->Q2017-->Q2009-->To output
	C channel(Output:OUT3 or OUT4)	MAIN SEL-->Q2009-->Q2017-->Q2208-->To output
	C channel(Output:OUT1 or OUT2)	MAIN SEL-->Q2009-->Q2017-->To output
Y/Cb/Cr-->Y/Cb/Cr	IN1 to 3	Input-->Relay for component video on NAVD-8202.-->To output
	IN4--> OUT2 Except OUT2	Input-->"RL2602,RL2603"-->Q2603--> To output Input-->Q2601-->"RL2601,RL2602"-->Relay for component video on NAVD-8202. -->To output
	BNC--> BNCOUT Except BNCOUT	Input-->"RL2502,RL2503"-->Q2503--> To output Input-->Q2501-->"RL2501,RL2502"-->Relay for component video on NAVD-8202. -->To output
	D4--> D4OUT Except D4OUT	Input-->"RL2405,RL2406"-->"RL2403,RL2404"-->Q2407--> To output Input-->"RL2405,RL2406"-->Q2401-->Relay for component video on NAVD-8202. -->To output
Y/C-->CV	Y channel	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->Q2203-->Q2016-->To output
	C channel	MAIN SEL-->Q2009-->Q2203-->Q2016-->To output
No using HDMI CV-->Y/C	Y channel	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->Q2040-->Q2206-->Q2017-->Q2009-->To output
	C channel(Output:OUT3 or OUT4)	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->Q2040-->Q2206-->Q2017-->Q2208-->To output
	C channel(Output:OUT1 or OUT2)	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->Q2040-->Q2206-->Q2017-->To output
Y/C-->Y/Cb/Cr	Y channel	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->Q2017-->Q2009-->Q2216-->Q2235-->Relay for component-->To output
	C channel	MAIN SEL-->Q2009-->Q2017-->Q2208-->Q2216-->Q2235-->Relay for component video on NAVD-8202.-->To output
CV-->Y/Cb/Cr		"CV-->Y/C conversion"-->Q2017-->"Y/C-->Y/Cb/Cr conversion"-->Relay for component video on NAVD-8202.-->To output
Y/Cb/Cr-->CV	No function	No channel
Y/Cb/Cr-->Y/C	No function	No channel
OSD immediate picture-->COMPOSITE output		The input signal is cut by Q2013 and a signal is outputted from Q2004.-->Q2008-->Q2016-->To output
OSD immediate picture-->S video output		The input signal is cut by Q2013 and a signal is outputted from Q2004.-->Q2008-->Q2040-->"CV-->Y/C conversion"-->To output
OSD immediate picture-->COMPONENT output		The input signal is cut by Q2013 and a signal is outputted from Q2004.-->Q2008-->Q2040-->"CV-->Y/C conversion"-->"Y/C-->Y/Cb/Cr conversion"-->To output
Using HDMI CV-->Y/C	Y channel	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->HDMI-->Q2017-->Q2009-->To output
	C channel(Output:OUT3 or OUT4)	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->HDMI-->Q2017-->Q2208-->To output
	C channel(Output:OUT1 or OUT2)	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->HDMI-->Q2017-->To output
Y/C-->Y/Cb/Cr	Y channel	MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->HDMI-->Relay for component video-->To output
	C channel	MAIN SEL-->Q2009-->Relay for component video on NAVD-8202.-->To output
CV-->Y/Cb/Cr		MAIN SEL-->Q2013-->Q2008-->Q2004-->Q2008-->HDMI-->Relay for component video on NAVD-8202.-->To output
Y/Cb/Cr-->CV		Input-->Relay for component video on NAVD-8202.-->Q2217-->HDMI-->Q2016-->To output
Y/Cb/Cr-->Y/C		Input-->Relay for component video on NAVD-8202.-->Q2217-->HDMI-->Q2017-->The signal flow from this step is a same as "Y/C-->Y/C" channel.

HDMI-->Y/Cb/Cr

HDMI-->Relay for component video on NAVD-8202.-->To output

HDMI-->Y/C

HDMI-->Q2017-->The signal flow from this step is a same as "Y/C-->Y/C" channel.

HDMI-->CV

HDMI-->Q2016-->To output

OSD immediate picture-->COMPOSITE output

Same as no using HDMI

OSD immediate picture-->S video output

Input signal is cut by Q2013 and a signal is outputted by Q2004.-->Q2008-->HDMI-->Q2017-->The signal flow from this step is a same as "Y/C-->Y/C" channel.

OSD immediate picture-->COMPONENT output

input signal is cut by Q2013 and a signal is outputted from Q2004.-->Q2008-->HDMI-->Relay for component video on NAVD-8202.-->To output

Signal flow(ZONE 2)

See a separate block diagram.

CV-->CV

MAIN SEL-->Q2046-->Q2019-->Q2011-->Q2019-->Q2015-->To output

Y/C-->Y/C

No function

No channel

Y/Cb/Cr-->Y/Cb/Cr

No function

No channel

Y/C-->CV



MAIN SEL-->Q2046-->Q2019-->Q2011-->Q2019

MAIN SEL-->Q2208 --> Q2203-->Q2015-->To output

CV-->Y/C

No function

No channel

Y/C-->Y/Cb/Cr

No function

No channel

CV-->Y/Cb/Cr

No function

No channel

Y/Cb/Cr-->CV

No function

No channel

Y/Cb/Cr-->Y/C

No function

No channel

OSD immediate picture-->COMPOSITE output

Input signal is cut by Q2046 and a signal is outputted from Q2011.-->Q2019-->

The signal flow from this step is same as "CV-->CV" channel.-->To output

OSD immediate picture-->S video output

No function

No channel

OSD immediate picture-->COMPONENT output

No function

No channel

Signal flow

See a separate block diagram.

CV-->CV

MAIN SEL-->Q2014-->To output

Y/C-->Y/C

Y channel
C channel

MAIN SEL-->Q2050-->To output

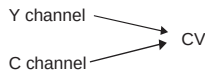
MAIN SEL-->Q2050-->To output

Y/Cb/Cr-->Y/Cb/Cr

No function

No channel

Y/C-->CV



MAIN SEL-->Q2050

Q2040-->Q2014-->To output

MAIN SEL-->Q2050

CV-->Y/C

No function

No channel

Y/C-->Y/Cb/Cr

No function

No channel

CV-->Y/Cb/Cr

No function

No channel

Y/Cb/Cr-->CV

No function

No channel

Y/Cb/Cr-->Y/C

No function

No channel

OSD immediate picture-->COMPOSITE output

No function

No channel

OSD immediate picture-->S video output

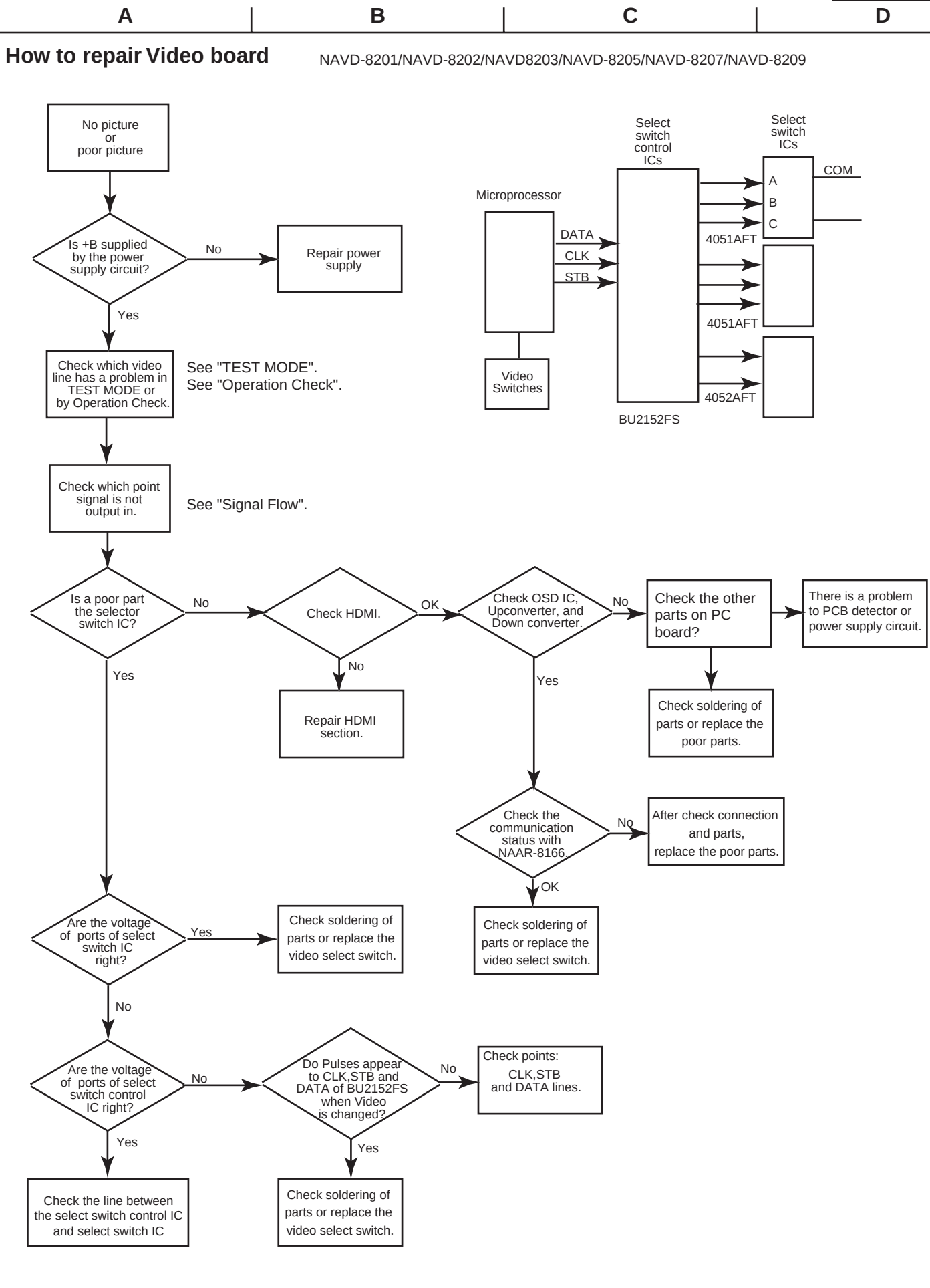
No function

No channel

OSD immediate picture-->COMPONENT output

No function

No channel



CONFIRMATION OF VIDEO SIGNAL INPUT AND OUTPUT, AND OSD (ON SCREEN DISPLAY) OPERATION

A-1. CONFIRMATION OF OSD(ON SCREEN DISPLAY) OPERATION

- a. Confirm that specified operations are made by Enter and Cursor keys of remote control.(Apply to Main and Zone 2)
- b. Confirm that the superimpose screen matches the system (NTSC/PAL) of the input signal , and displays approximately in the center of the monitor screen.(It applies to Main and Zone2 other than UDD and UJJ type)
Confirm the item above about UDD and UJJ models by the NTSC system.

TEST MODE 5-00

- c. Confirmation of signal detector circuit (CYDEC,SVDEC1,SVDEC2,SVDEC3)

Input signals to Component 1, S-video 1 and composite 1 at the same time , and confirm that the component signal outputs to component output 1 and S-video 1 signal outputs to S-video 2,3 and 4.

TEST MODE 5-01

A-2. CONFIRMATION OF THE INPUT AND OUTPUT OPERATION OF VIDEO SIGNAL

- d. Confirm the input and output operation of Composite Video terminals.

1-6 and Front Composite video input → Composite 4 video out (Apply to Main)

TEST MODE 5-21~27

TEST MODE 5-20 No signal outputs from the output terminal.

1-6 and Front Composite video input → Composite1 video out (Apply to ZONE 2)

TEST MODE 5-21~27

TEST MODE 5-20 No signal outputs from the output terminal.

1-6 and Front Composite video input 1~3 → Composite video out (Apply to Rec and Zone 3)

TEST MODE 5-21~27

TEST MODE 5-20 No signal outputs from the output terminal.

- e. Confirm the input and output operation of S-Video terminals.

1-6 and Front S-video input S-video4 out (Apply to Main)

TEST MODE 5-13~19

TEST MODE 5-12 → No signal outputs from the output terminal.

1-6 and Front S-video input 2~3 S-video out (Apply to Rec and Zone 3)

TEST MODE 5-13~19

TEST MODE 5-12 → No signal outputs from the output terminal.

1-6 and Front S-video input composite1 out (Apply to Zone 2)

TEST MODE 5-13~19

TEST MODE 5-12 → No signal outputs from the output terminal.

- f. Confirmation of input and output operation of component, BNC and D4 terminals

Confirm the input and output operation of component video terminals.

Component/BNC/D4 video input → Component/BNC/D4 video out

TEST MODE 5-02~10

- g. Confirm the output operation of conversion of video signal.

S-video input → Composite video out. (Apply to Rec. and Zone 3)

TEST MODE 5-11

TEST MODE

The test modes from 5-00 to 5-27 use the check of analog signals which does not go via HDMI circuit.

TEST No	Main Input	Zone2 Input	Z3(Rec) Input	MAIN OUTPUT	Z2 OUTPUT	Z3/REC OUTPUT
5-00	Composite1	-	-	All Component	-	-
5-01	Component1	S-video1 Composite1	S-video1	All Component and S-video 4	S-video3	S-video2
5-02	Component1	-	-	All Component	-	-
5-03	Component2	-	-	All Component	-	-
5-04	Component3	-	-	All Component	-	-
5-05	Component4	-	-	All Component	-	-
5-06	BNC	-	-	All Component	-	-
5-07	D4-1	-	-	All Component	-	-
5-08	D4-2	-	-	All Component	-	-
5-09	D4-3	-	-	All Component	-	-
5-10	D4-4	-	-	All Component	-	-
5-11	S-video1	S-video2	S-video3	Composite1	Composite2	Composite3
5-12	S-video1	-	-	All S-video outputs turn off	←	←
5-13	S-video1	S-video1	S-video1	S-video4	Composite1	S-video1
5-14	S-video2	S-video2	S-video2	S-video4	Composite1	S-video2
5-15	S-video3	S-video3	S-video3	S-video4	Composite1	S-video3
5-16	S-video4	S-video4	S-video4	S-video4	Composite1	S-video1
5-17	S-video5	S-video5	S-video5	S-video4	Composite1	S-video1
5-18	S-video6	S-video6	S-video6	S-video4	Composite1	S-video1
5-19	S-video Front	S-video Front	S-video Front	S-video4	Composite1	S-video1
5-20	Composite1	-	-	All Composite outputs turns off.	←	←
5-21	Composite1	Composite1	Composite1	Composite4	Composite1	Composite3
5-22	Composite2	Composite2	Composite2	Composite4	Composite1	Composite2
5-23	Composite3	Composite3	Composite3	Composite4	Composite1	Composite2
5-24	Composite4	Composite4	Composite4	Composite4	Composite1	Composite2
5-25	Composite5	Composite5	Composite5	Composite4	Composite1	Composite2
5-26	Composite6	Composite6	Composite6	Composite4	Composite1	Composite2
5-27	Composite Front	Composite Front	Composite Front	Composite4	Composite1	Composite2

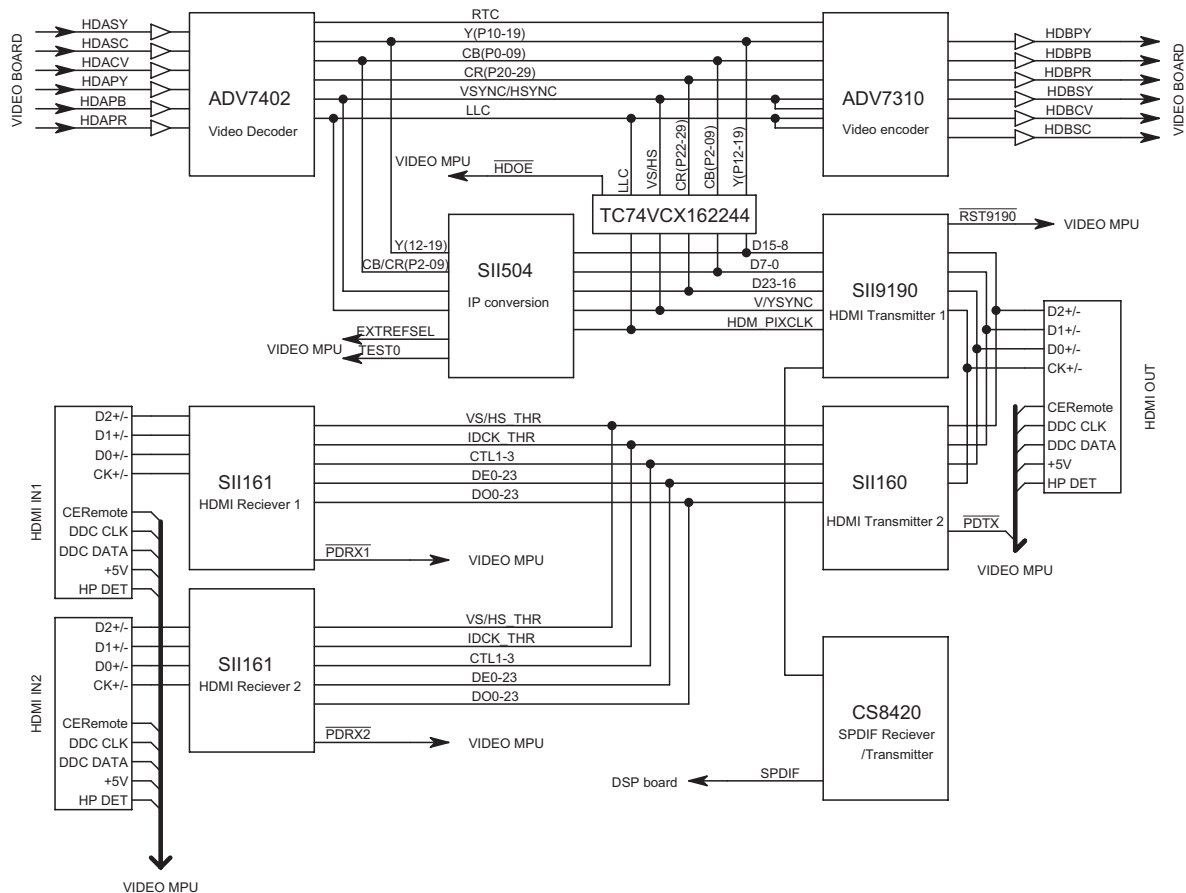
[illegible]

TEST No	INPUT	SELECTOR		OUTPUT		
5-28	HDMI IN1	DVD	HDMI OUT			
5-29	HDMI IN2	VIDEO-1	HDMI OUT			
5-30	COMPONENT IN3(HI OPT4	VIDEO-2	HDMI OUT	COMPONENT OUT1		
	COMPONENT IN3(SI OPT4	VIDEO-3	HDMI OUT	COMPONENT OUT1	SVIDEO OUT4	COMPOSITE OUT4
5-31	SVIDEO IN4 COAXIAL3	VIDEO-3	HDMI OUT	*COMPONENT OUT1	*SVIDEO OUT4	*COMPOSITE OUT4
5-32	COMPOSIT IN5 OPT5	VIDEO-4	HDMI OUT	*COMPONENT OUT1	*SVIDEO OUT4	*COMPOSITE OUT4

HDMI		L board	
HDMI		L board	
H/I board	HDMI	H/I board	L board
H/I board	HDMI	H/I board	L board
H/I board	HDMI	H/I board	L board
H/I board	HDMI	H/I board	L board
		H/I board	L board

2004 ONKYO Service Seminar HDMI

1.BLOCK DIAGRAM C-HDMI Board



1-1.Video Assign:Hdmi=Video

- Analog video signal is changed into digital signal by ADV7402.
- ADV7402 performs YC separation and up conversion.
- SII504 changes the signal of 480i or 720i into 480p or 720p. (I/P conversion)
- The signal beyond it does not pass along SII504. It is bypassed by TC74VCX162244.
- Digital video signal is changed into an analog video signal by ADV7310.
- Digital video signal is changed into HDMI signal by SII9190.
- CS8420 corrects the waveform of SPDIF signal.
- SII9190 superimposes SPDIF on HDMI signal.

1-2.Video Assign Hdmi=HDMI 1 or 2 (HDMI THROUGH MODE)

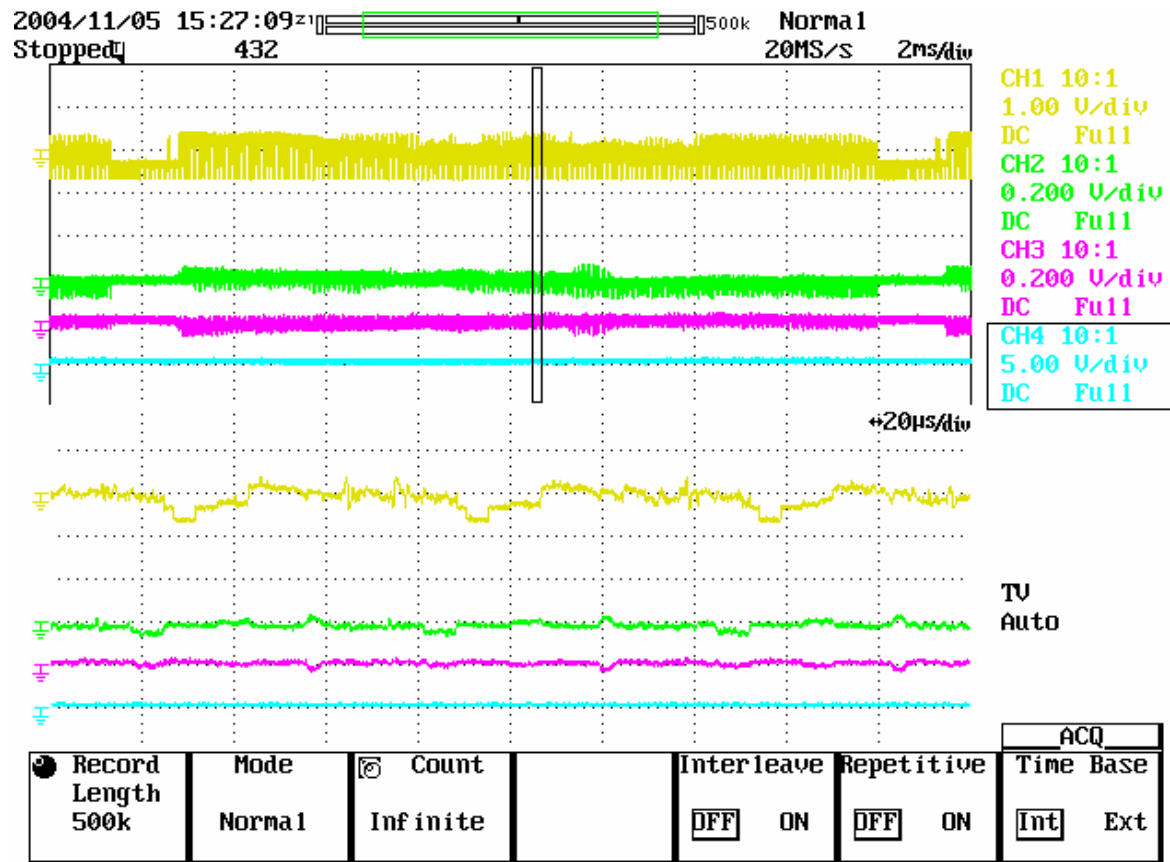
- The signal of HDMI IN 1/2 is changed into the digital signal of low frequency by SII161.
The signal of HDMI cannot perform a direct change for high frequency.
- The HDMI signal changed into low frequency is returned by SII160.

2.Wave Form

2-1.Video Assign:Hdmi=Video

2-1-a. Decoder (ADV7402) Input

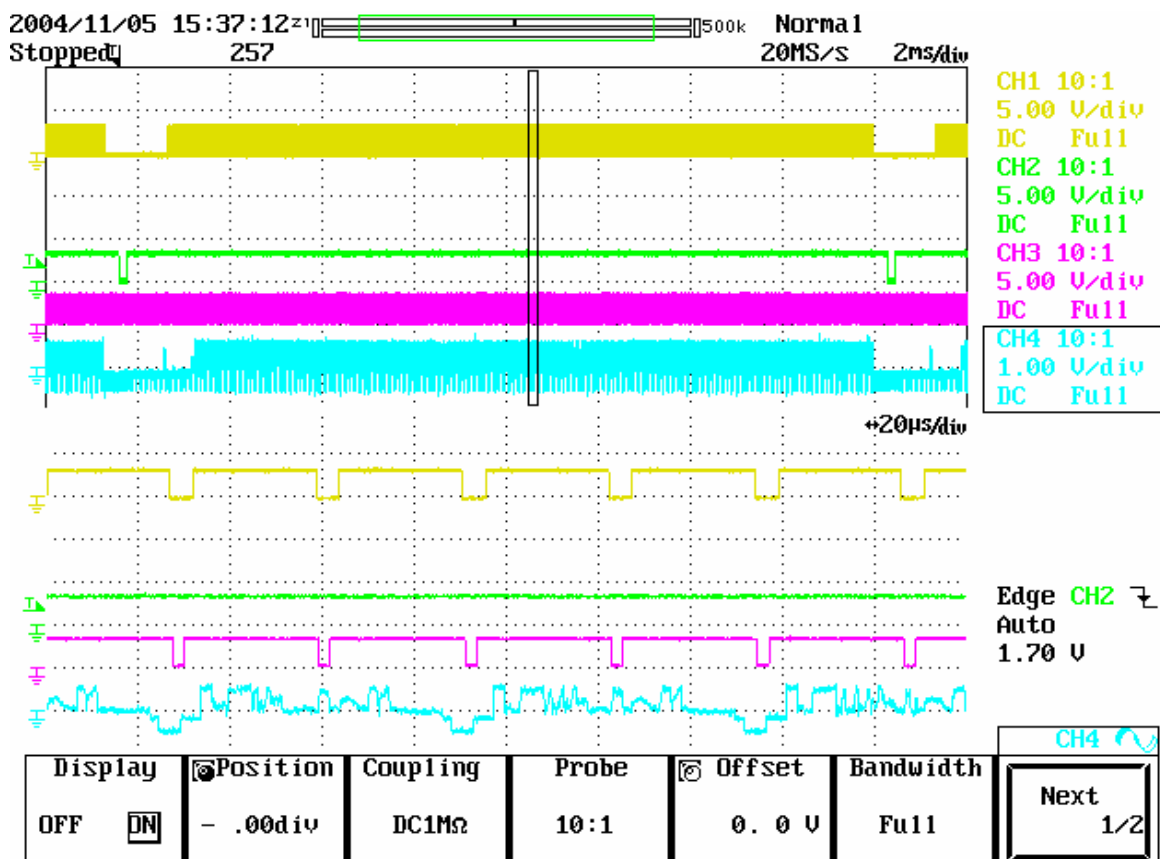
Video Signal Y, Pb, Pr (C8017,8105,8103)



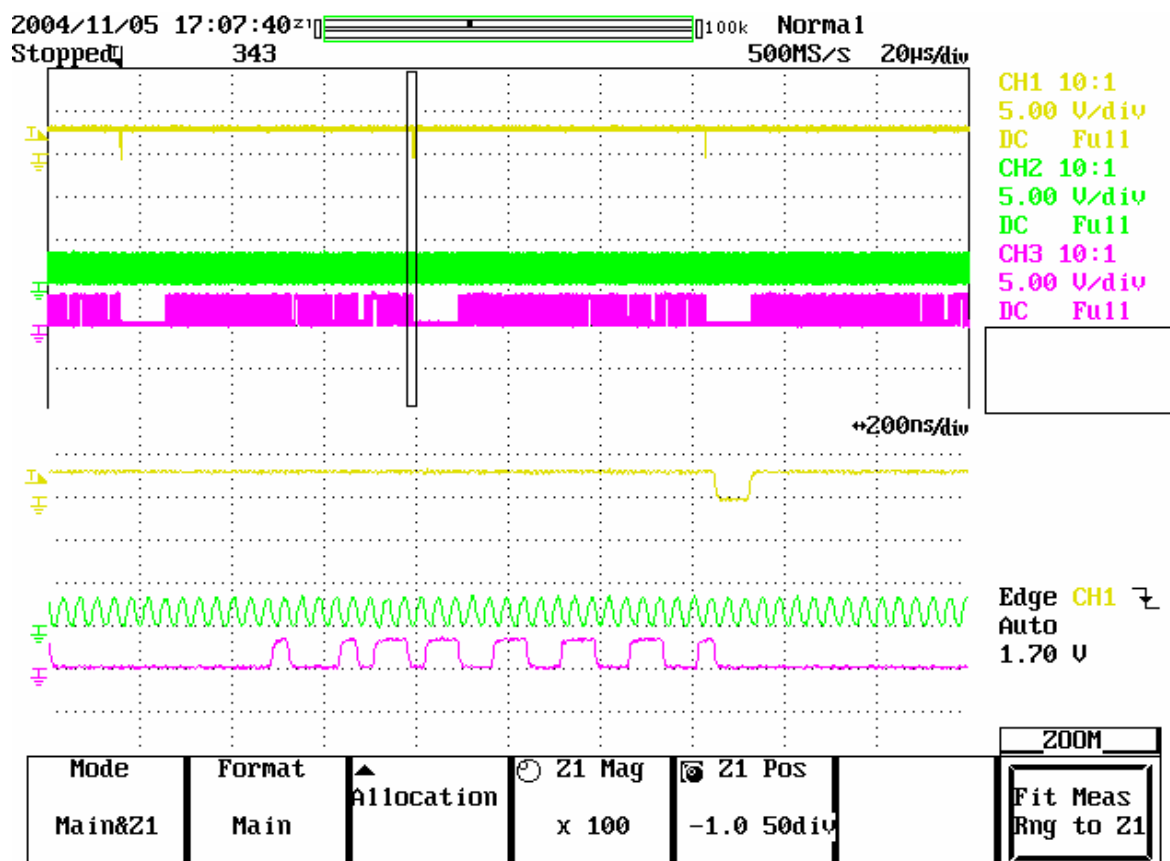
2-1-b. Decoder (ADV7402) Output of Sync Signal

FIELDDE,VS,HC/CS,PY:(PIN NO.:99,98,4,76)

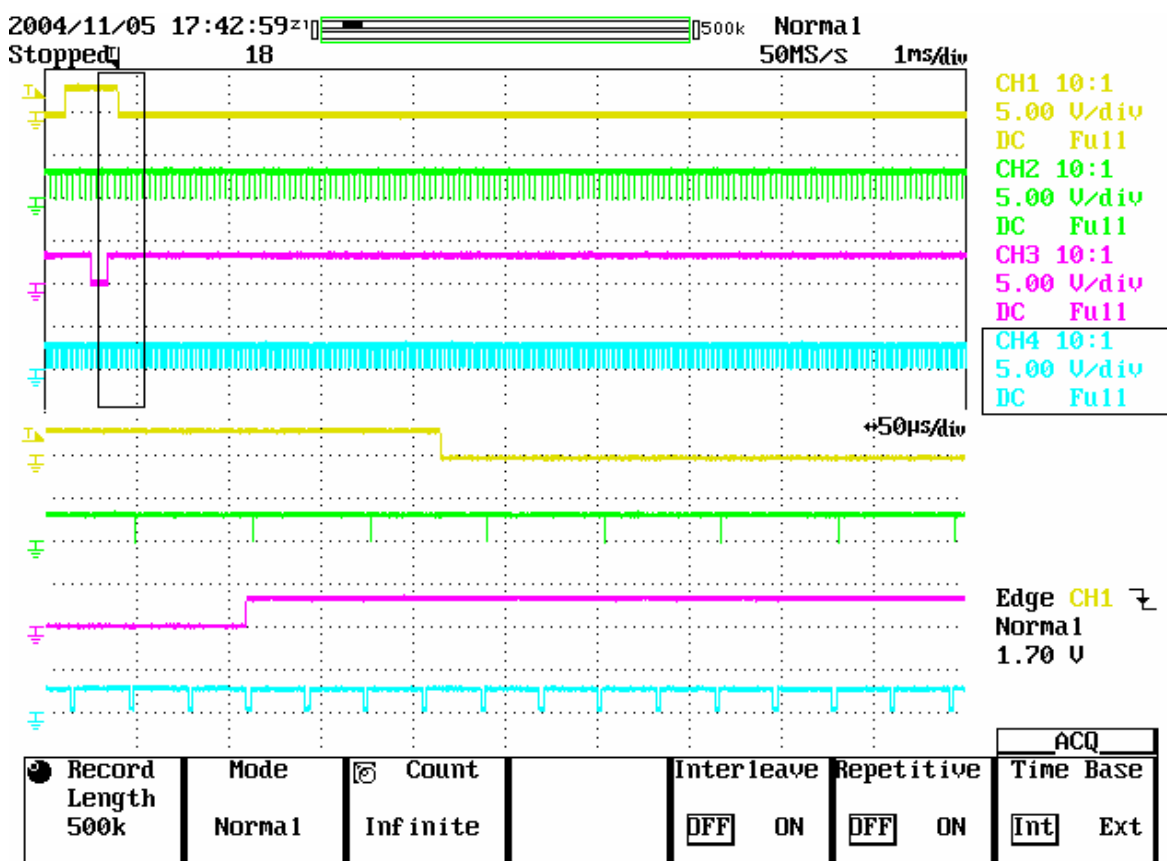
Each SYNC synchronizes with PY.



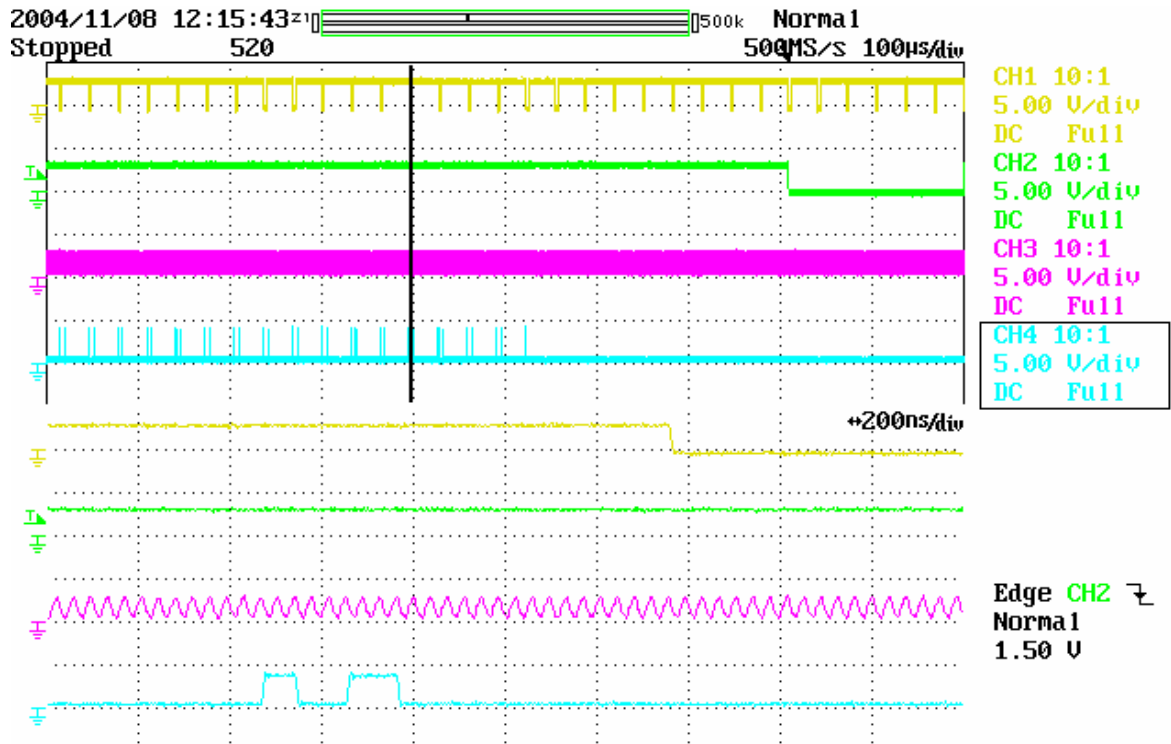
2-1-c. Decoder (ADV7402) Output of digital data
HC/CS,LLC(Pixel Clock),VP* :(PIN NO.,4,36,10..etc)



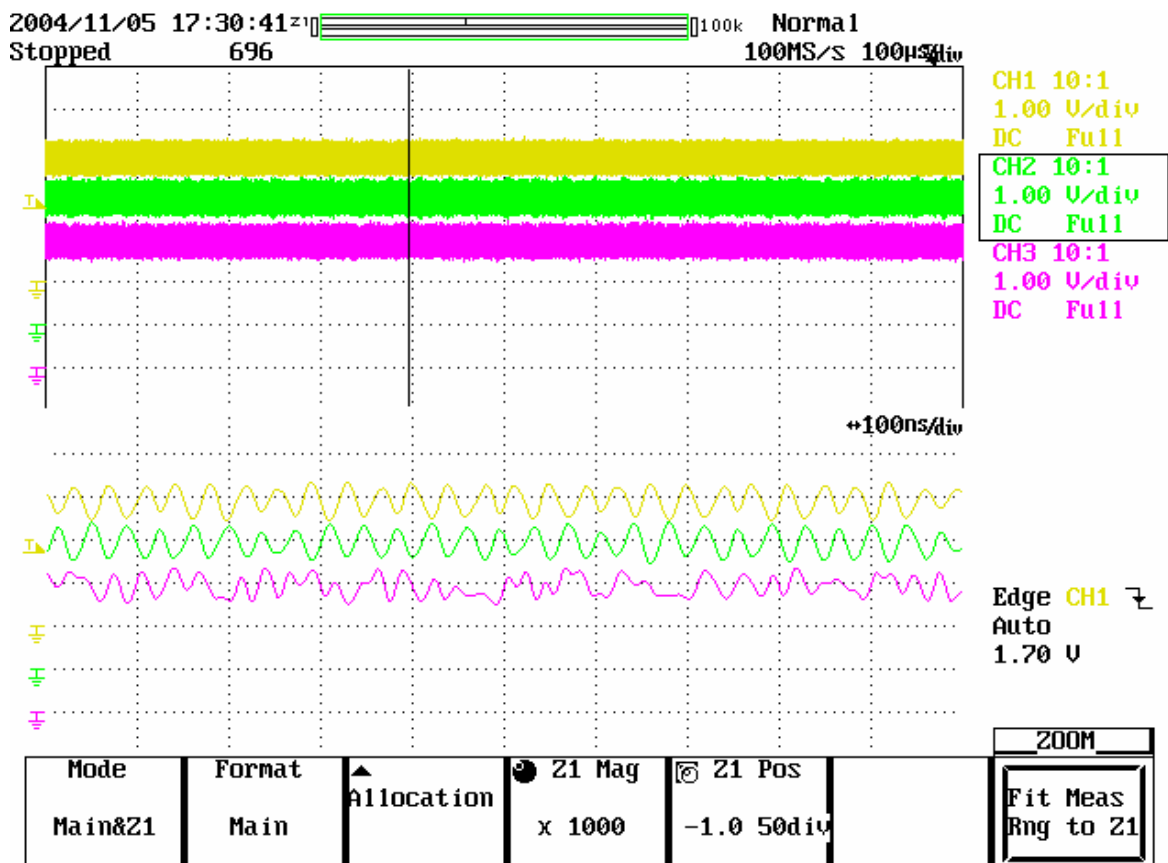
2-1-d. IP conversion (SII504) Input/Output of Sync Signal
VS,HC/CS,HDMI_VSYNC,HDMI_HSYNC (PIN NO.174,175,7,8)
The frequency of HSYNC has doubled.



2-1-d.IP conversion (SII504) Output of Sync Signal and Digital Data.
HDMI_VSYNC,HDMI_HSYNC,HDM_PIXCLK,HDMI_Y*/CR*/CB* (PIN NO.7,8,46,32..etc)



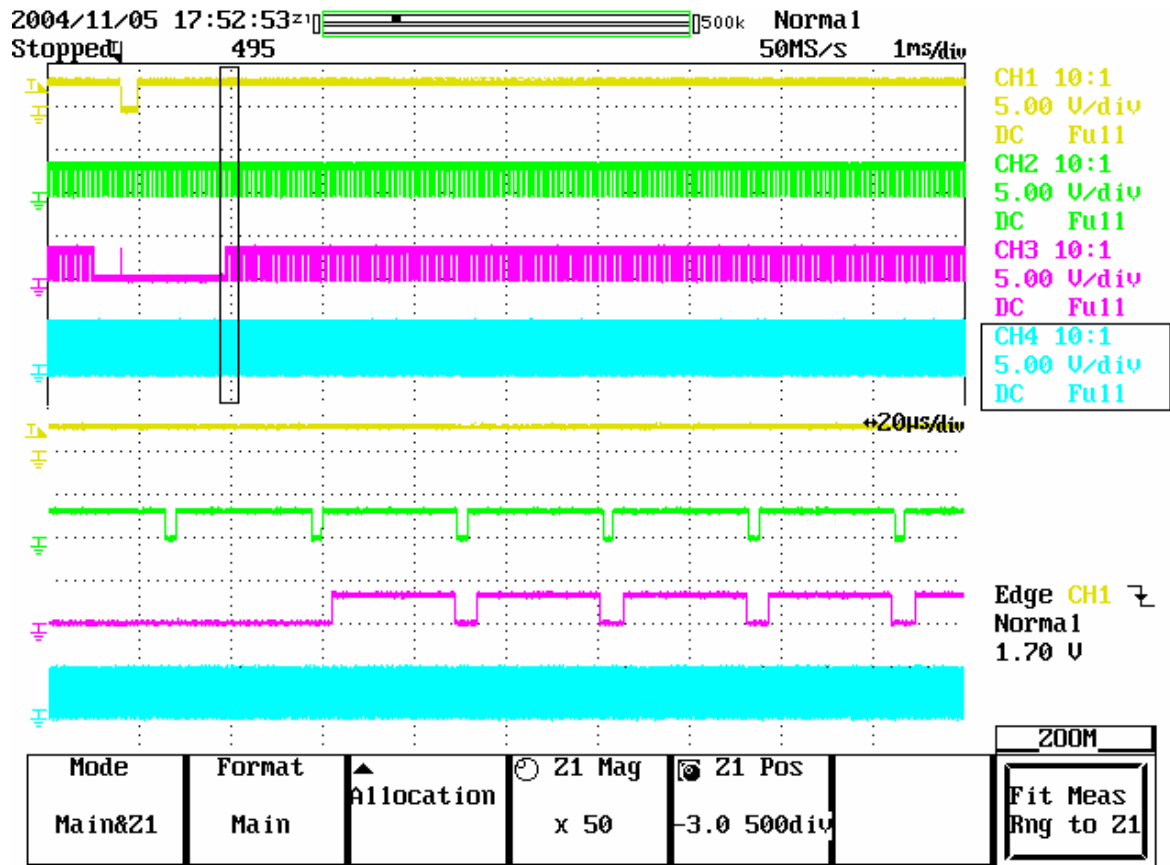
2-1-e. HDMI Output
P8302 TXC+,TXC-,TX*+/- (PIN NO.12,10,9,7,6,4,3)
There is amplitude of 600mVpp on the basis of 3.3V.



2-2.Video Assign Hdmi, HDMI1/2(HDMI THROUGH MODE)

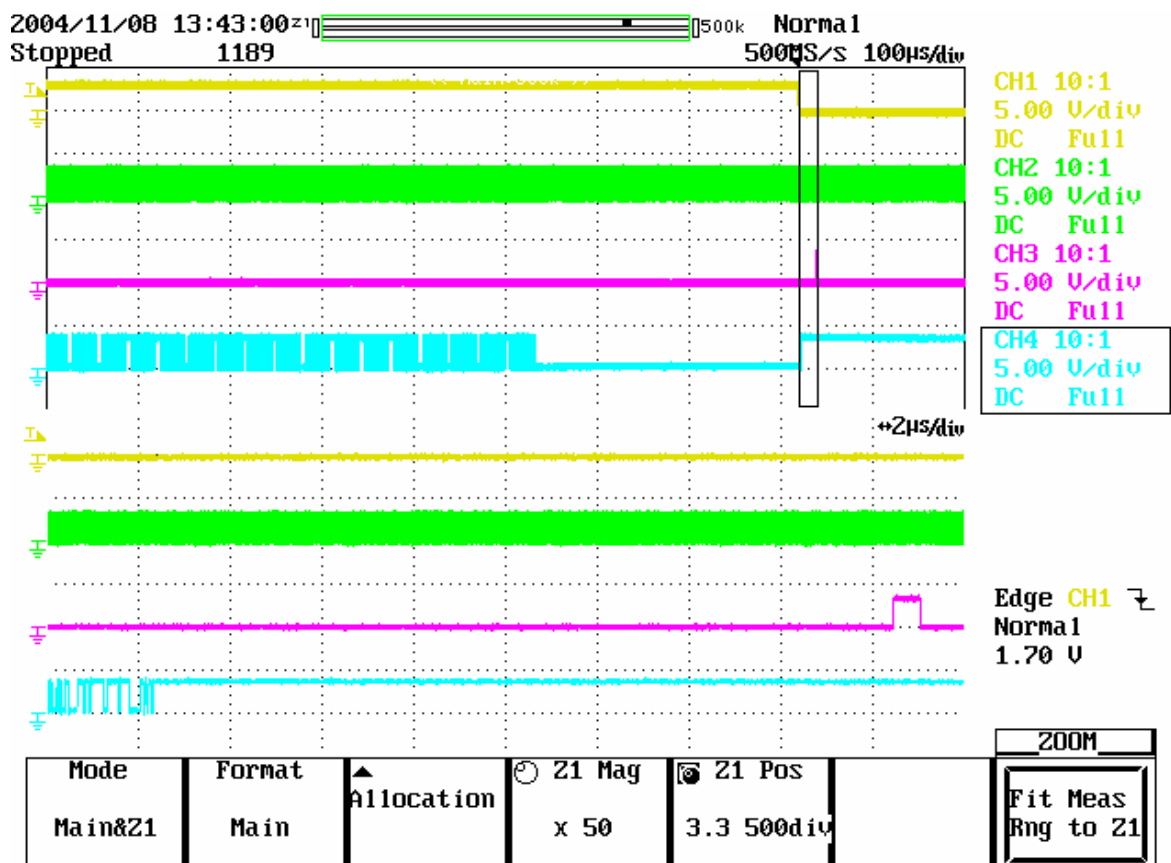
2-2-a. SII160 Sync Signal.

VS_THR,HS_THR,DE_THR,IDCK_THR (PIN NO.77,76,78,80)



2-2-b. SII160 Sync Signal.

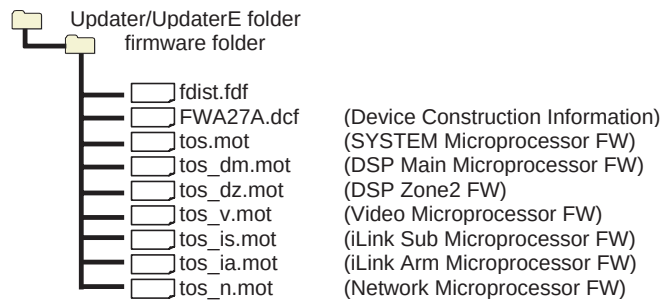
VS_THR,IDCK_THR,CTL*, DE* (PIN NO.77,80,82..etc,90..etc)



How to update

0. Preparation

Create a folder in the folder containing "Updater.exe" or "UpdaterE.exe" and name it "firmware". Store the firmware information file and firmware object files into the "firmware" folder. Here is the tree structure.

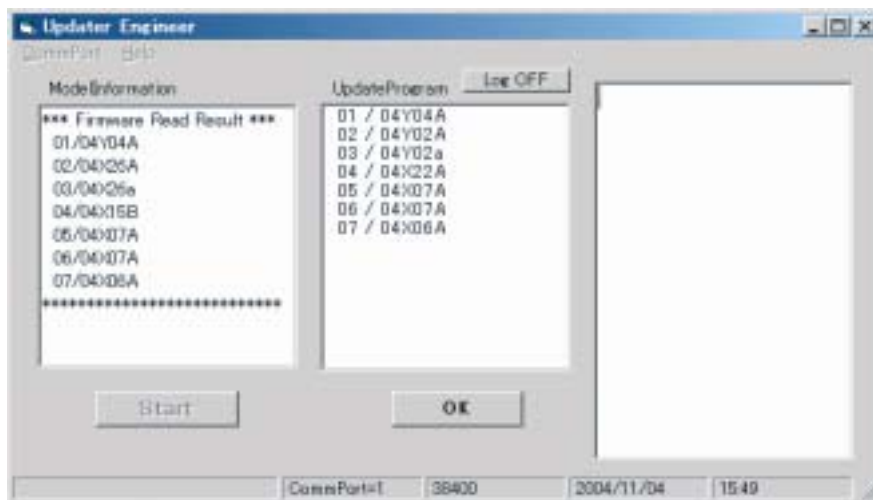


1.Update Procedure for service centres/stations

1. Connect the unit and PC with a RS-232C cable.
2. Turn on the unit.
3. Start "UpdaterE.exe".

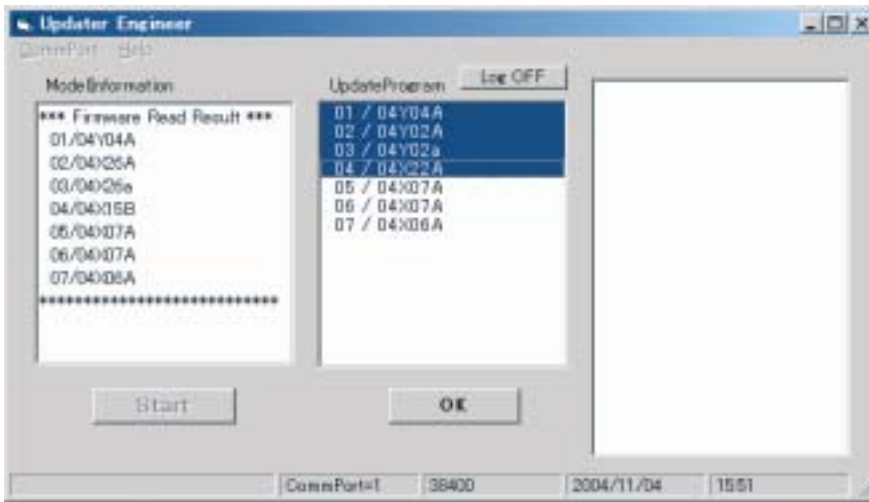


4. Click "Start".

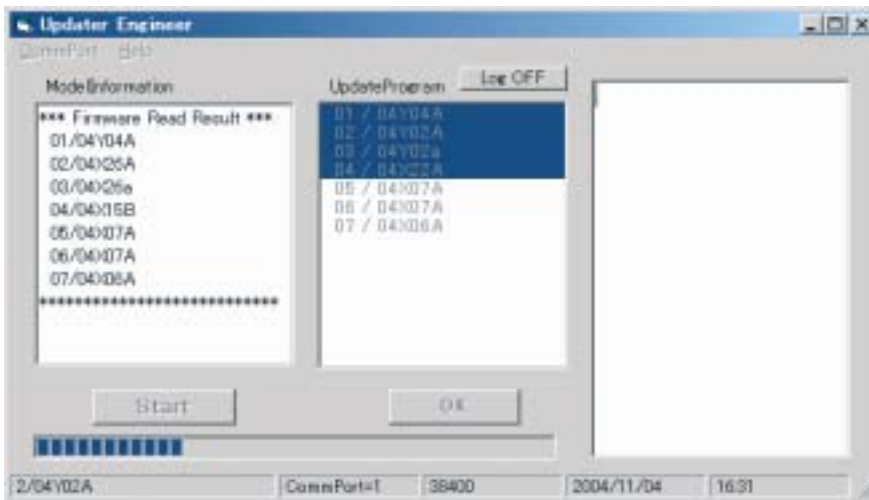


You can see each current version in the left window.

5. Select a program(s) to be updated in the right window.



6. Click "OK" to start update.

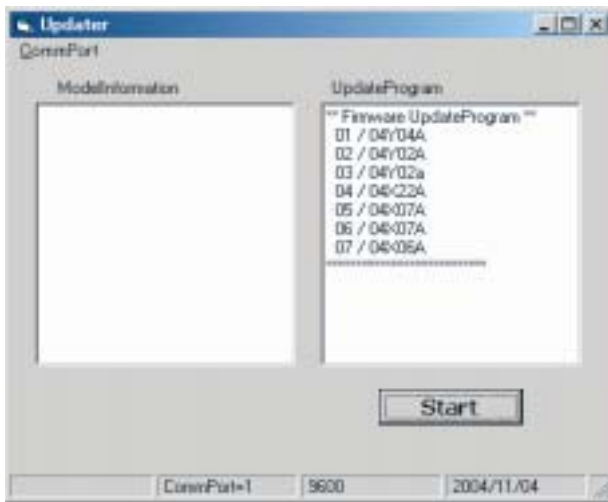


7. The below message comes out when the update successfully completes. Click "OK" to turn the unit to the standby mode.

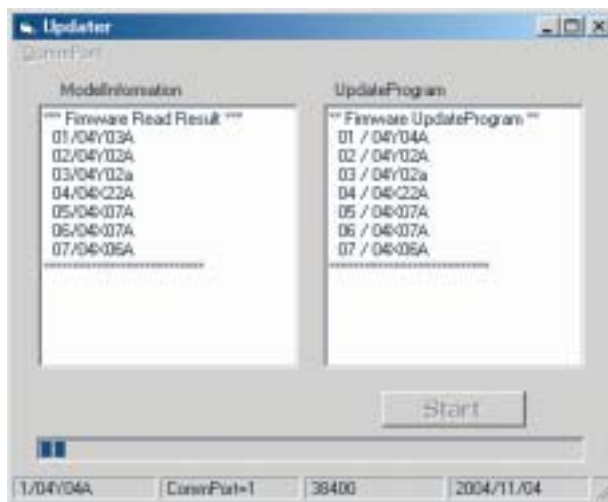


2.Update Procedure for end users

1. Connect the unit and PC with a RS-232C cable.
2. Turn on the unit.
3. Start "Updater.exe".



4. Click "Start".



5. The below message comes out when the update successfully completes. Click "OK" to turn the unit to the standby mode.



How to check a version

1. Check procedure using OSD

Main menu

```

Main A Setup
=====
0. Hardware Setup
1. Speaker/Output Setup
2. Input Setup
3. Listening Mode Setup
4. Audio Adjust
5. Preference
6. i.LINK Setup
7. Network Setup
8. Lock/Version
  
```

a. Master version

Confirm the firmware version for the main program.

b. i.LINK(IEEE1394) version

Confirm the firmware version for i.LINK.

c. Net-Tune version

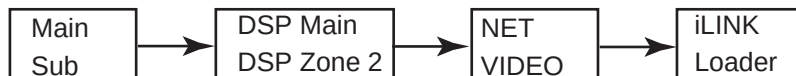
Confirm the firmware version for the Net-Tune program.

d. HDMI version

Confirm the firmware version for HDMI.

2. Check procedure using Operation key

Hold "DISPLAY" button down and then press "STANDBY/ON" button.



You can confirm the each firmware version.

3. Check procedure using PHAST command

Firmware version transmission comand : "#UV"

Computer → Main microprocessor "!\n#UVRQ(CR) " (Version check command)

Computer ← Main microprocessor "!\n#UVii..iinnmmmmmmmmaaaaaaabbbbbcccccc czzzzzzz(CR) "

ii..ii : Product ID (24 figures) (POS code+Serial number)

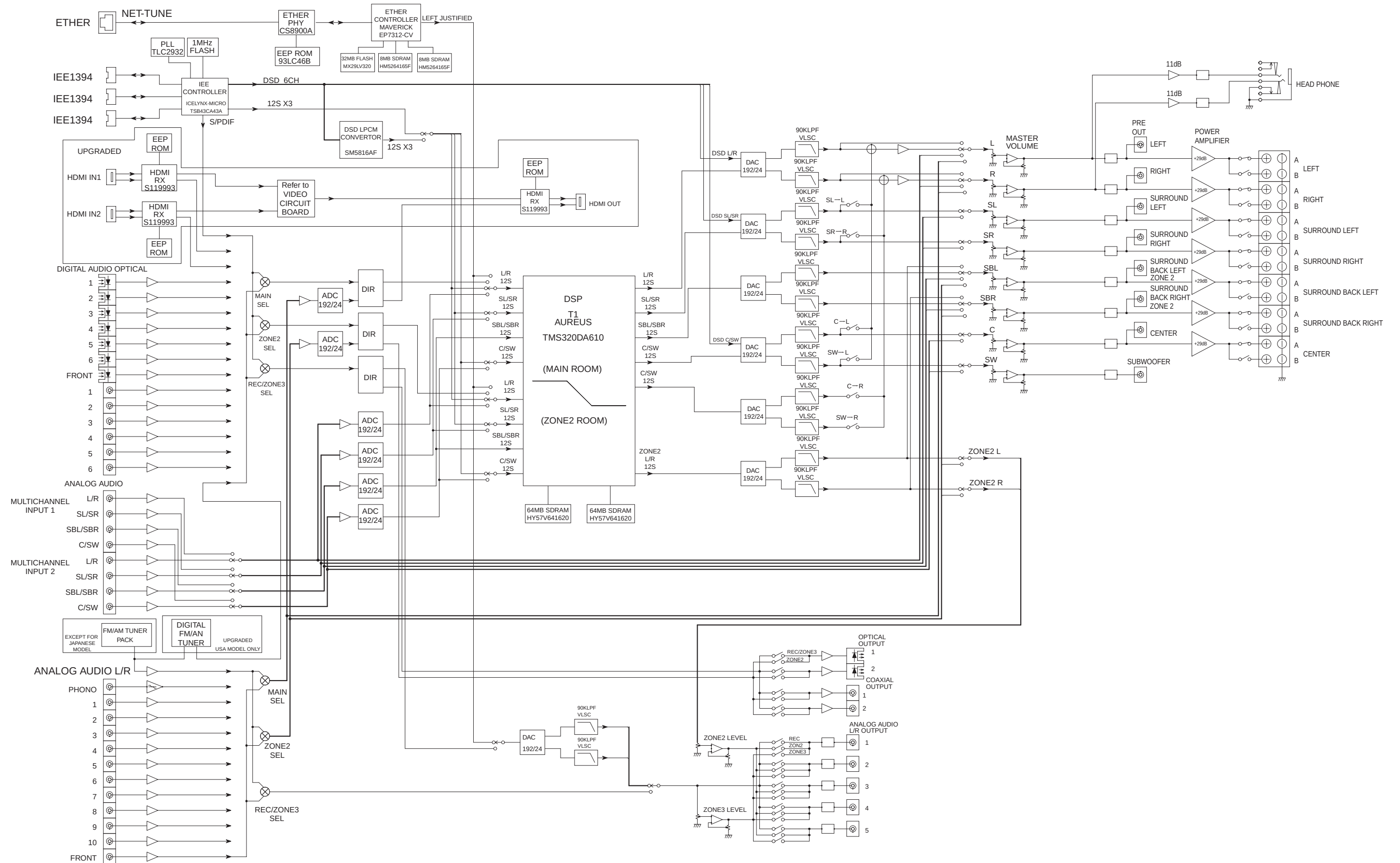
nn : Firmware numbers

mmmmmmmm: Firmware No.+version(ASCII) Ex:01001.01 / 0204310A

Firmware No.01 shows the version of main microprocessor.

When the version request command or product ID write command sends from the computer to the microprocessor, the microprocessor returns the product ID, firmware numbers, and firmware version information to the computer.

BLOCK DIAGRAM



Disassembling Procedure

Step

- 1 Remove 7 decorative screws (A141) to release Top Cover (A140) with Trox driver.
- 2 Remove 8 decorative screws (A141) to release SIDE PANEL (L)/(R) (A138, A139).
- 3 Remove 6 screws (A194: 3 on the top face, 3 on the bottom face) to release F PANEL (A157).
- 4 Disconnect FFC(P7501) from DISPLAY Board (U23).
- 5 Remove 3 screws which fix front VIDEO, OPTICAL terminal Boards (U238, U235) to F Panel (A157) and remove these Boards from Front Section AS.
Now, Front Section AS is completely separated from the unit.

- 6 Remove 24 copper screws (A052: 4 on the top face, 20 on the side face) to release BRACKET(RAIL-B) (A078).
- 7 Remove resin BRACKET (U) (A079).
- 8 Turn the unit around and remove Special Screws (A094) using Allen (hexagon) wrench to release PLATE A to L (A007,010,013,015,018,021,024,026,028). Note that Toothed Washers (A189) are fixed with the screws.
- 9 Remove Toothed 10mm Screws (A038) which fix AUDIO, OPTICAL, COAXIAL terminal Boards (U03,04,092).
- 10 Remove Toothed 10mm Screws (A004) which fix Speaker Terminal Board (U154).
- 11 Remove any screws which fix Pin Jacks and Terminals (3*8mm, RS232)
- 12 Remove 3*8mm screws (A004) which fix REAR PANEL (A002).
- 13 Turn the unit upside down and remove a 3*6mm screw (A144) which fixes BOTTOM board (A142) and REAR PANEL(A002).
Now, REAR PANEL is completely separated from the unit.

- 14 Dismount AUDIO, OPTICAL, COAXIAL terminal Boards (U03,04,092) from Mother Board (U11).
- 15 Disconnect 3 sockets located on upper side of Power Supply Board (U16) (in upper left area when looking from above).
- 16 Remove 2 HOLDER(KGLS-12RT) (A037) from the above Boards and Disconnect FFC (P3120) from Mother Board (U11).
Take Power Supply Board (U16) out of the unit.
- 17 Disconnect all the sockets including FFC's from Mother Board (U11).
- 18 Release Mother Board by removing HOLDER (KGLS-5RT).

- 19 Turn the unit upside down and remove 4 4*12mm screws (A149) and 19 3*8mm toothed screws (A143) to release LEG AS (A145) and BOTTOM board (A142).

- 20 Disconnect Socket (P5000b) and 14 screws (A052) on DAC Board (U02) to separate it from Driving Amplifier Board (U12) installed below Transformer (T9001).

Remove Wire Ties which fix cables to BRACKET (L)/(R) (A001,006).

Remove the copper screws with washer which fix copper plate on Driving Amplifier Board (U12).

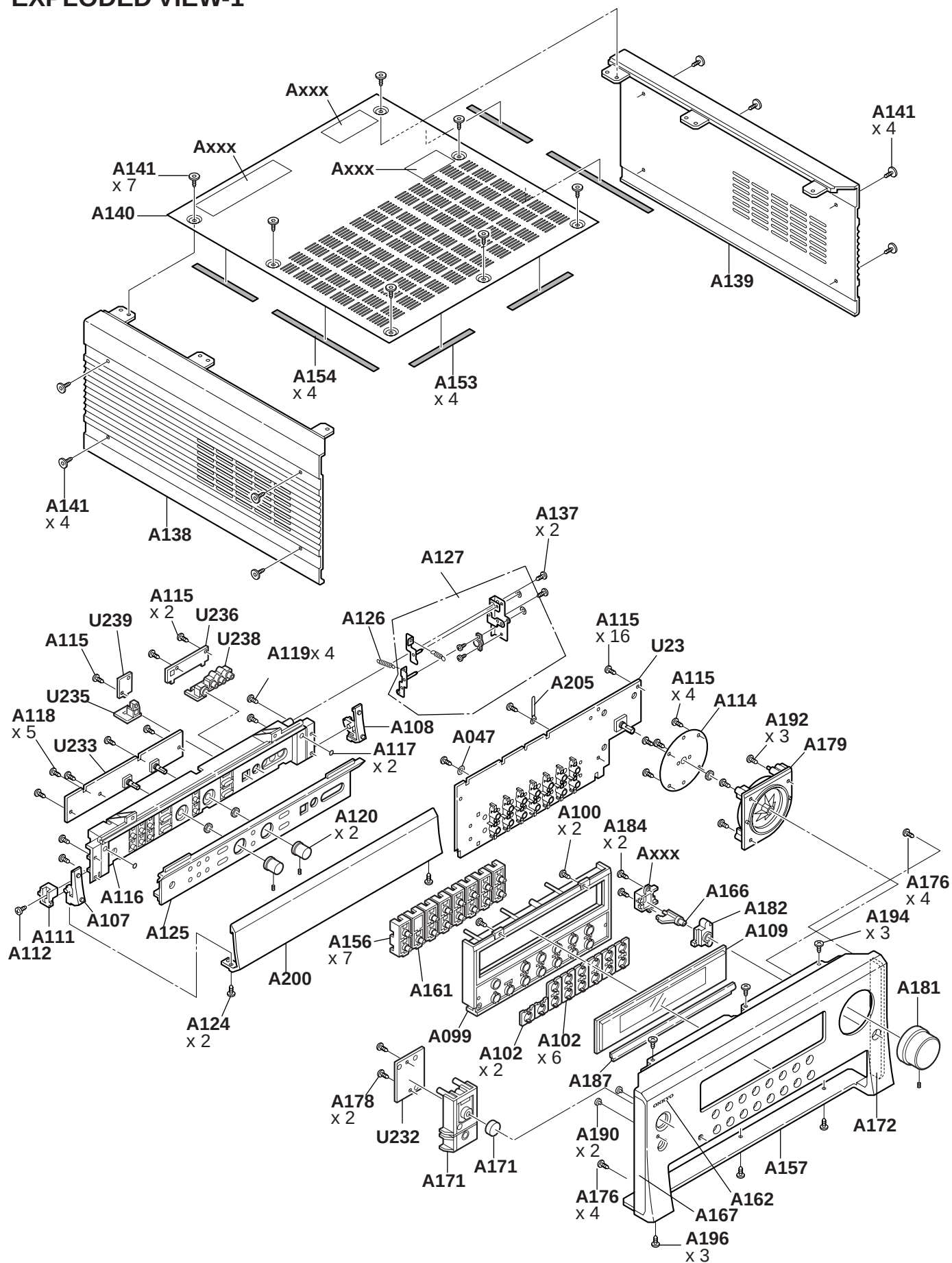
- 21 Make sure that Speaker Terminals (U154) is separated from the unit.

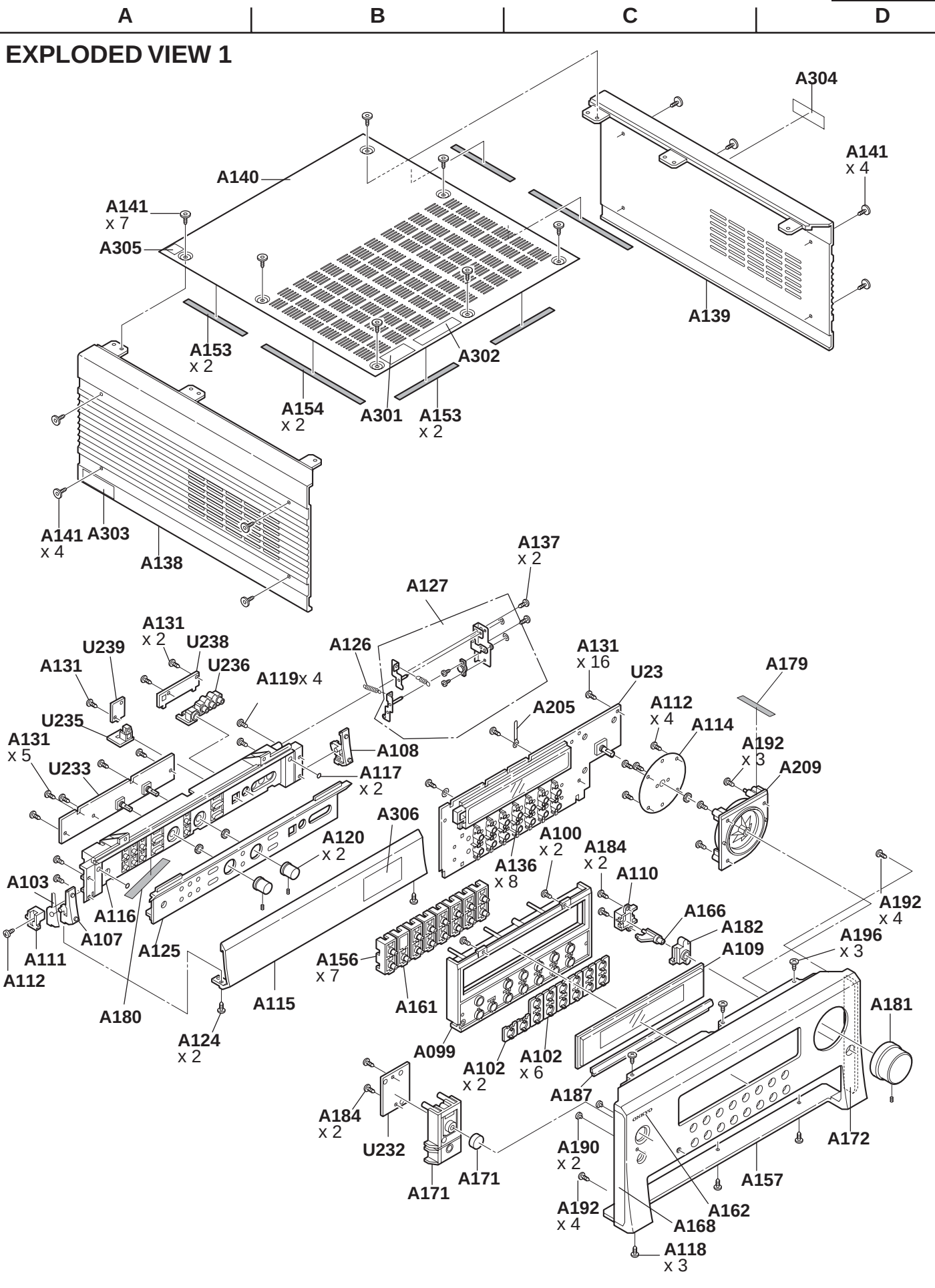
Disassembling Procedure

Step

- 22 Disconnect Socket (P6940) from Transformer (T9001) and located on Bias Selector PC Board (U15) held by F BRACKET (A081).
- 23 Disconnect Socket (6950A) and Crimps (P5001,5002) on Driving Amplifier Board (U12) and any lower positioned sockets which connect Driving Amplifier Board (U12) and Connector PC Boards (U14,25) fixed to HEAT SINK(M) (A044) .
Remove 9 copper screws (A052) to release the Driving Amplifier Board (U12).
- 24 Remove all the 4*8mm screws (A082) to release F BRACKET (A081).
- 25 Turn the unit around again and remove 8 4*10mm screws (A070) with washer which fix Transformer (T9001).
Take BRACKET(PT) (A066), Transformer (T9001), and 2 SHIELD PLATE(PT) (A068) out of the unit.
- 26 Remove all the copper screws (A030) which fix BRACKET (RAIL-A) (A072) to BRACKET (L)(A001)/(R) (A006)/(C)(A056).
Take BRACKET(RAIL-A)(A072), resin BRACKET (BTM) (A074), and DAC Board (U02) out of the unit.
- 27 Remove 4 copper screws (A052) which fix Secondary Power Supply Board (U152).
- 28 Remove 6 4*8mm screws which fix BRACKET(UL)(A063)/(UR)(A064) to BRACKET(L)(A001)/(R)(A006).
- 29 Remove 4 copper screws which fix the both ends of BRACKET(C)(A056) to BRACKET (L)(A001)/(R)(A006).
Take BRACKET(C)(A056) with 2 HEAT SINK(S)(A057) and Secondary Power Supply Board (U152) out of the unit.
- 30 Remove 4 copper screws (A086) to release HOLDER(CH) (A084) from BRACKET(UL)(A063)/(UR)(A064).
Remove 3*14 special screw (A085) to release HOLDER(CH) (A084) from Electric Capacitor (C6901,6902).
Remove 4 3*8mm screws (A052) which fix Electric Capacitor Board (U163).
- 31 Remove 12 copper screws (A052) to release RETAINER(H) (A048) which fix 2 HEAT SINK(M) (A044) to BRACKET(L)(A001)/(R)(A006).
In the same way, remove screws which fix BRACKET(UL)(A063)/(UR)(A64).
- 32 Turn BRACKET (L)(A001)/(R)(A006) upside down and disconnect sockets of cables from FAN (E9001,9002).
- 33 Remove 4 screws which fix 2 BRACKET(H) (A023) and remove Power Amplifier PC Boards from BRACKET(L)(A001)/(R)(A006).
- 34 Remove 12 copper screws (A052) which fix 2 BRACKET(H)(A023) to 2 HEAT SINK (M)(A044).
Put Power Amplifier PC Boards upside down remove copper screws to release Front/Back Connector PC Boards.
Separate Front/Back Connector PC Boards from Power Amplifier PC Boards to get HEAT SINK (M) blocks.

EXPLODED VIEW-1





A

B

C

D

EXPLODED VIEW 2

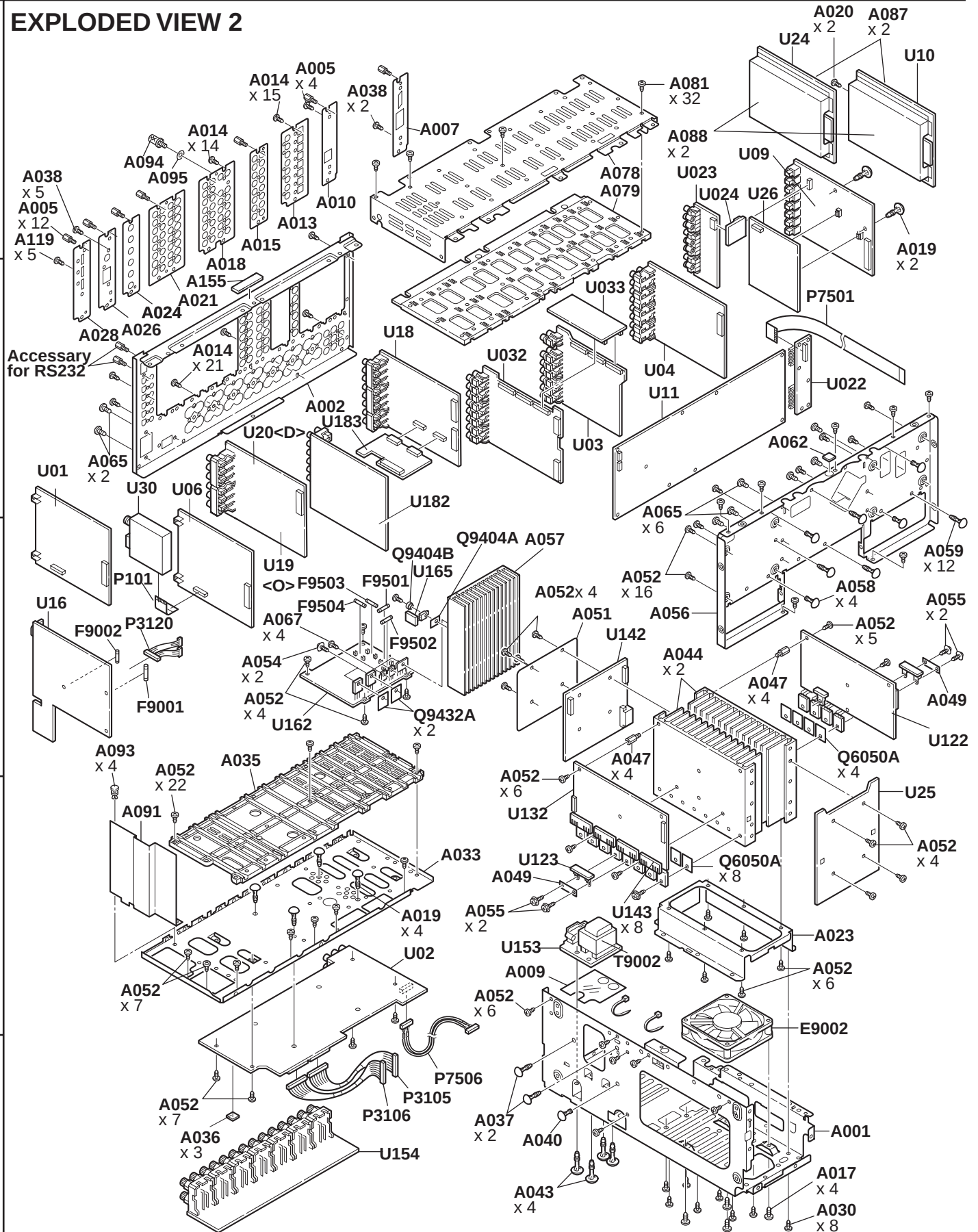
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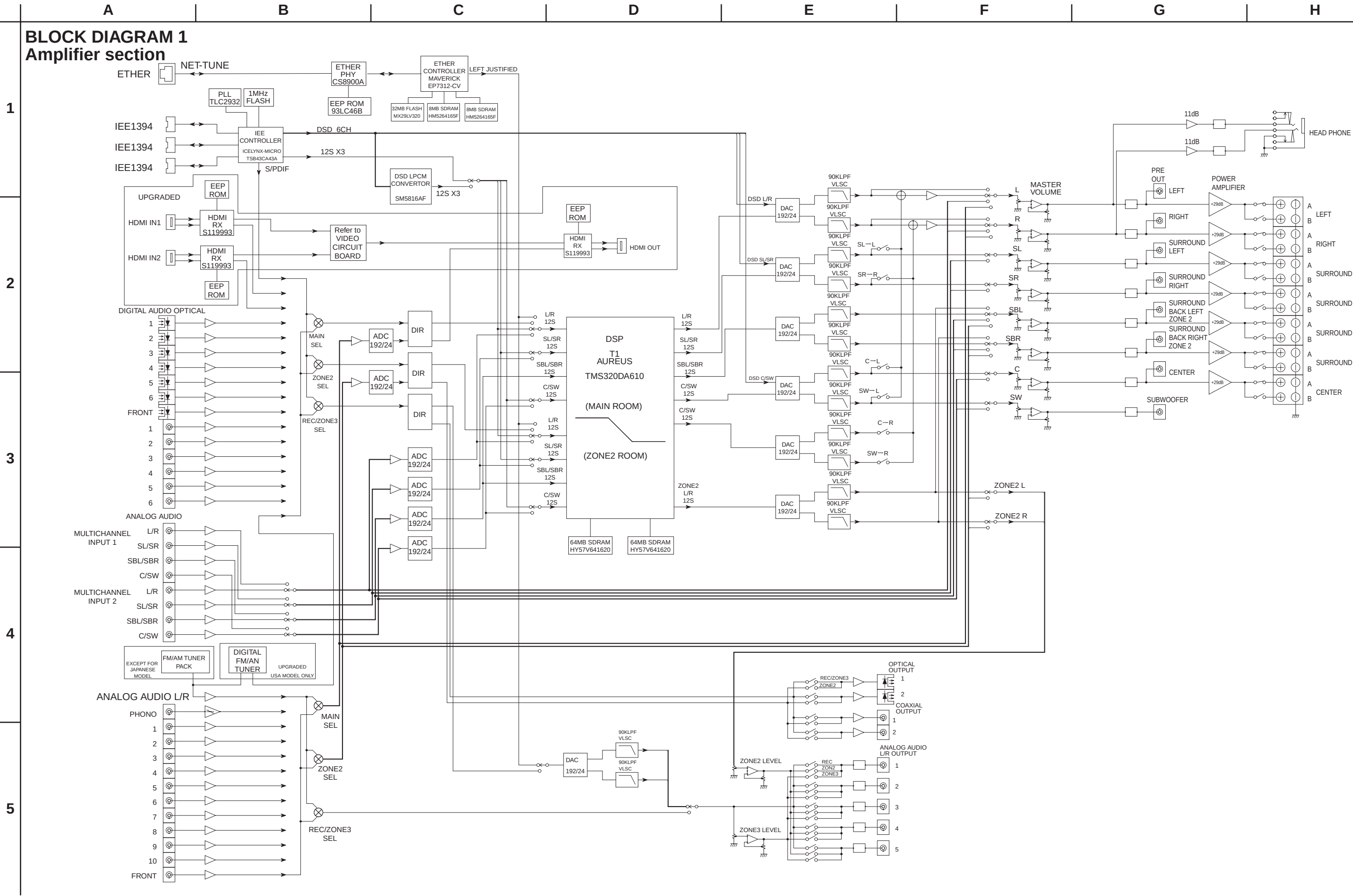
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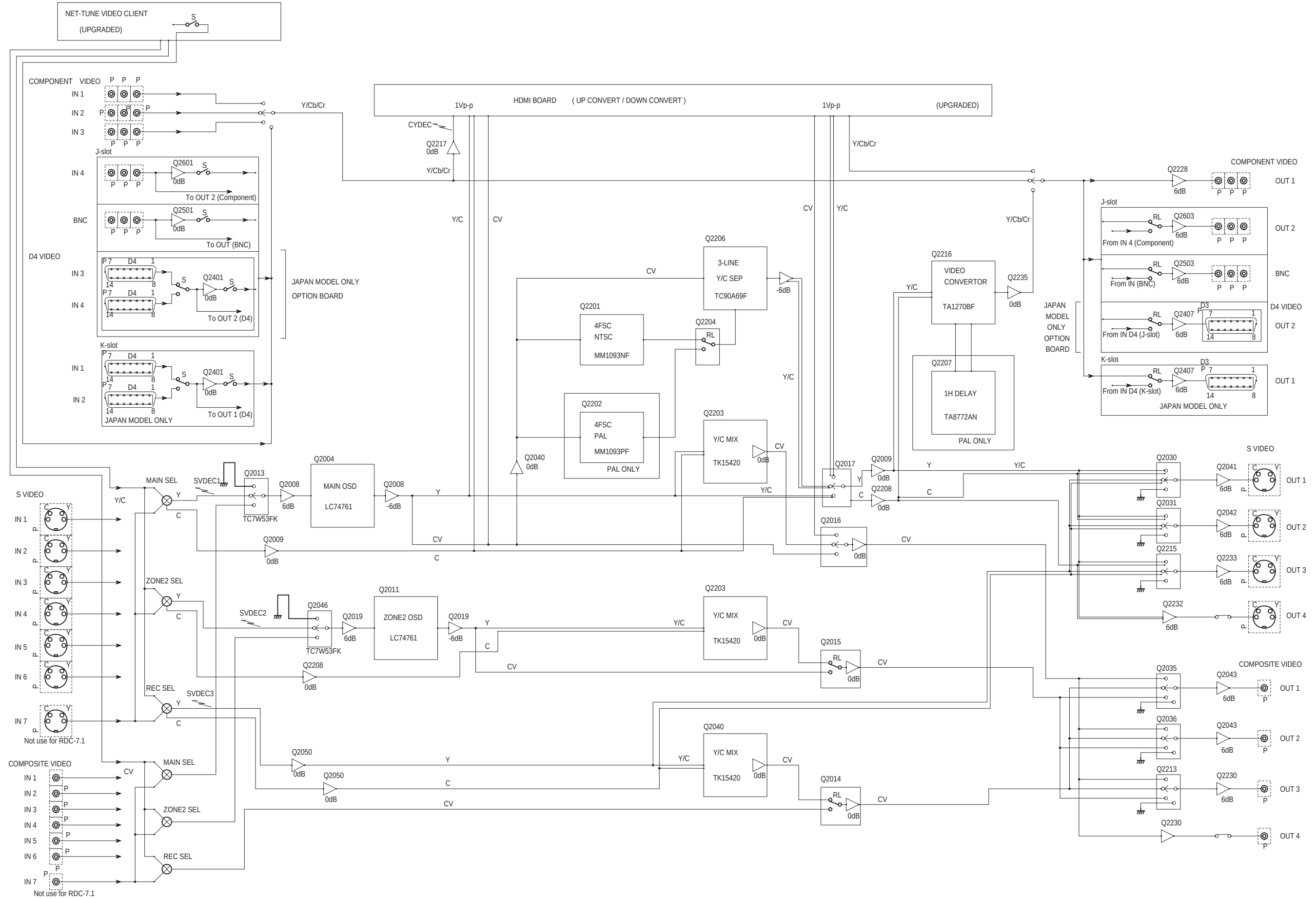
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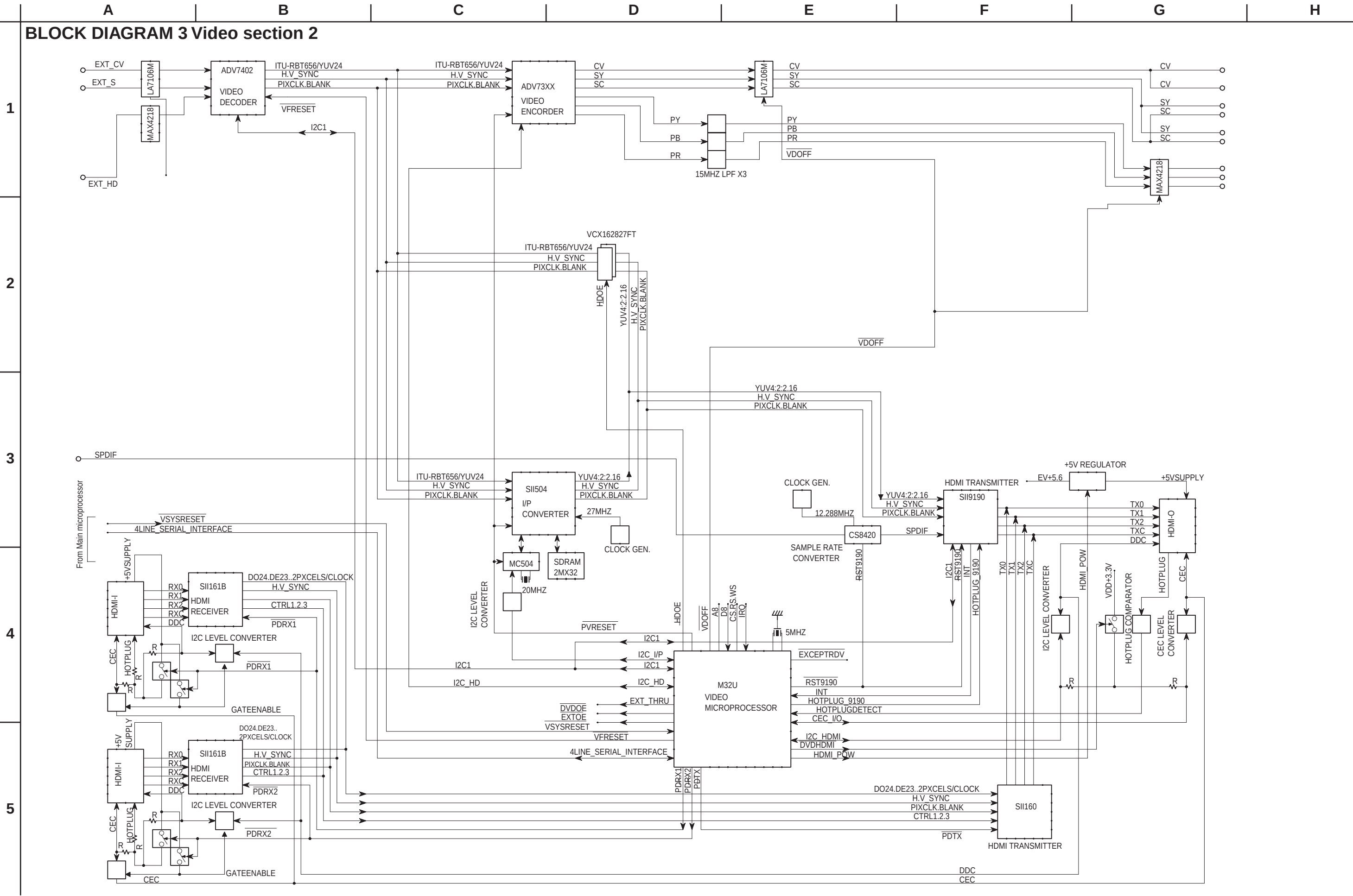
BLOCK DIAGRAM 1
Amplifier section



BLOCK DIAGRAM

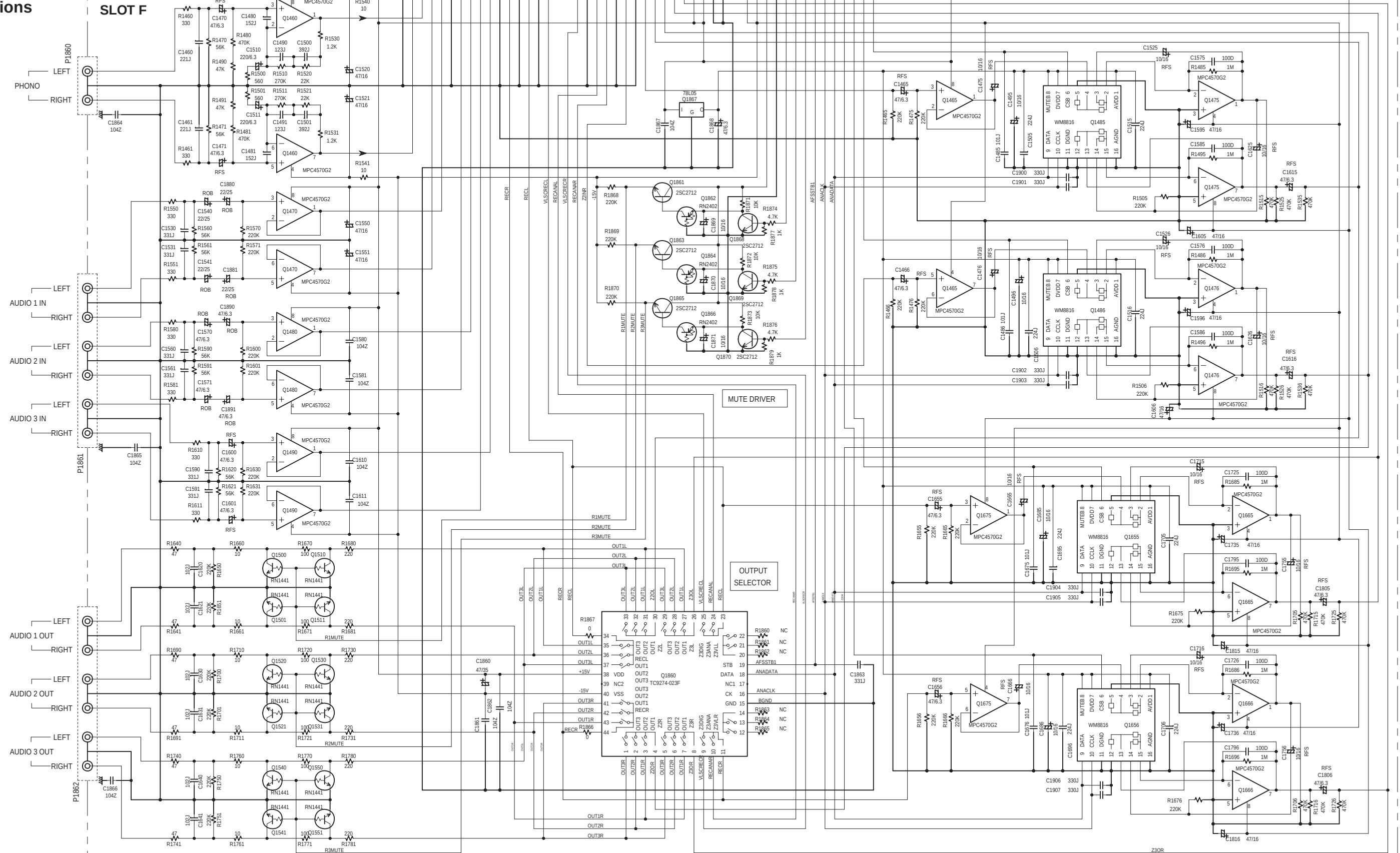


BLOCK DIAGRAM 3 Video section 2



SCHEMATIC DIAGRAM 1

Phono/AF IN/OUT
1 to 3 sections



SCHEMATIC
DIAGRAM 2
AF IN 4 to 9 and
OUT 4/5
sections

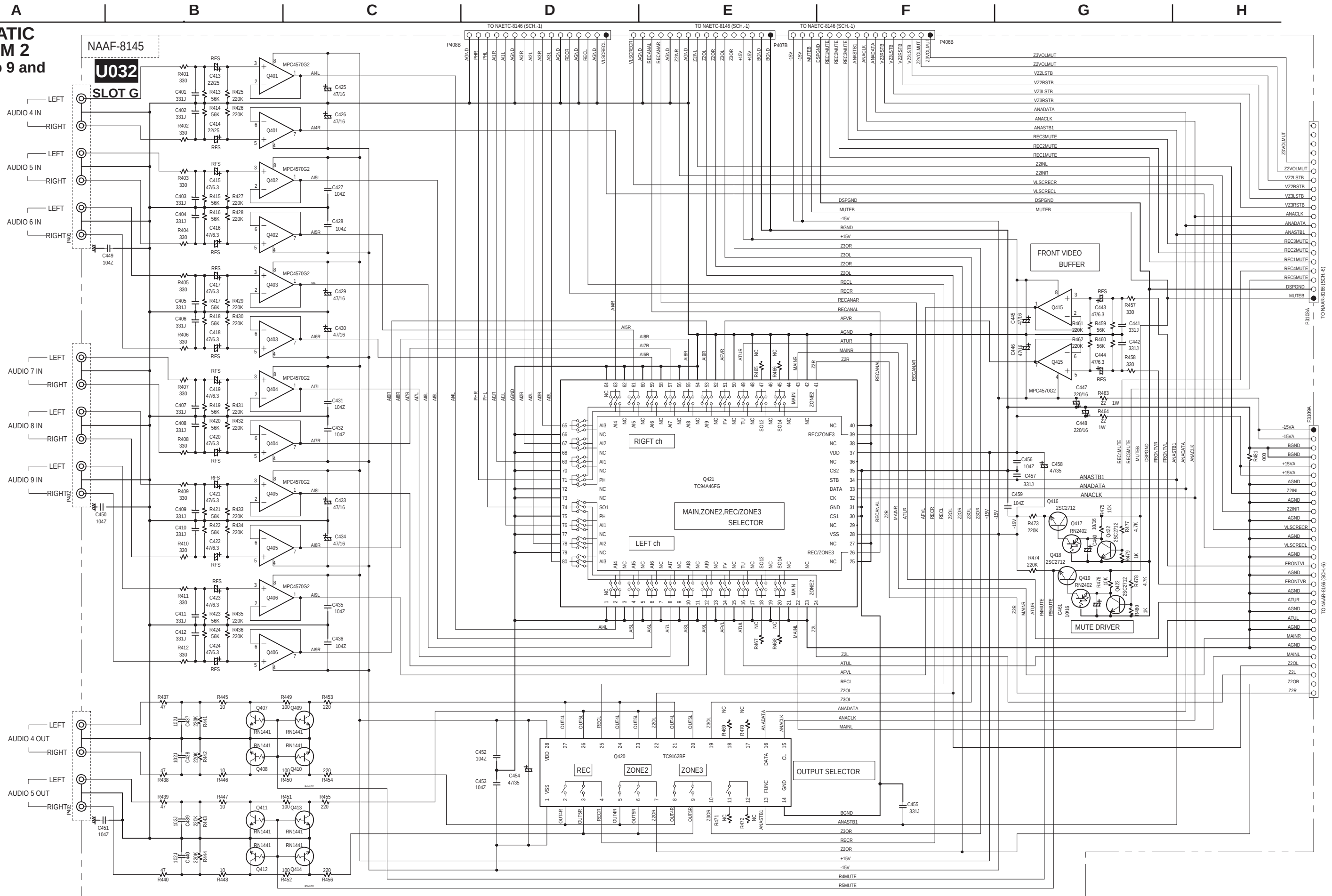
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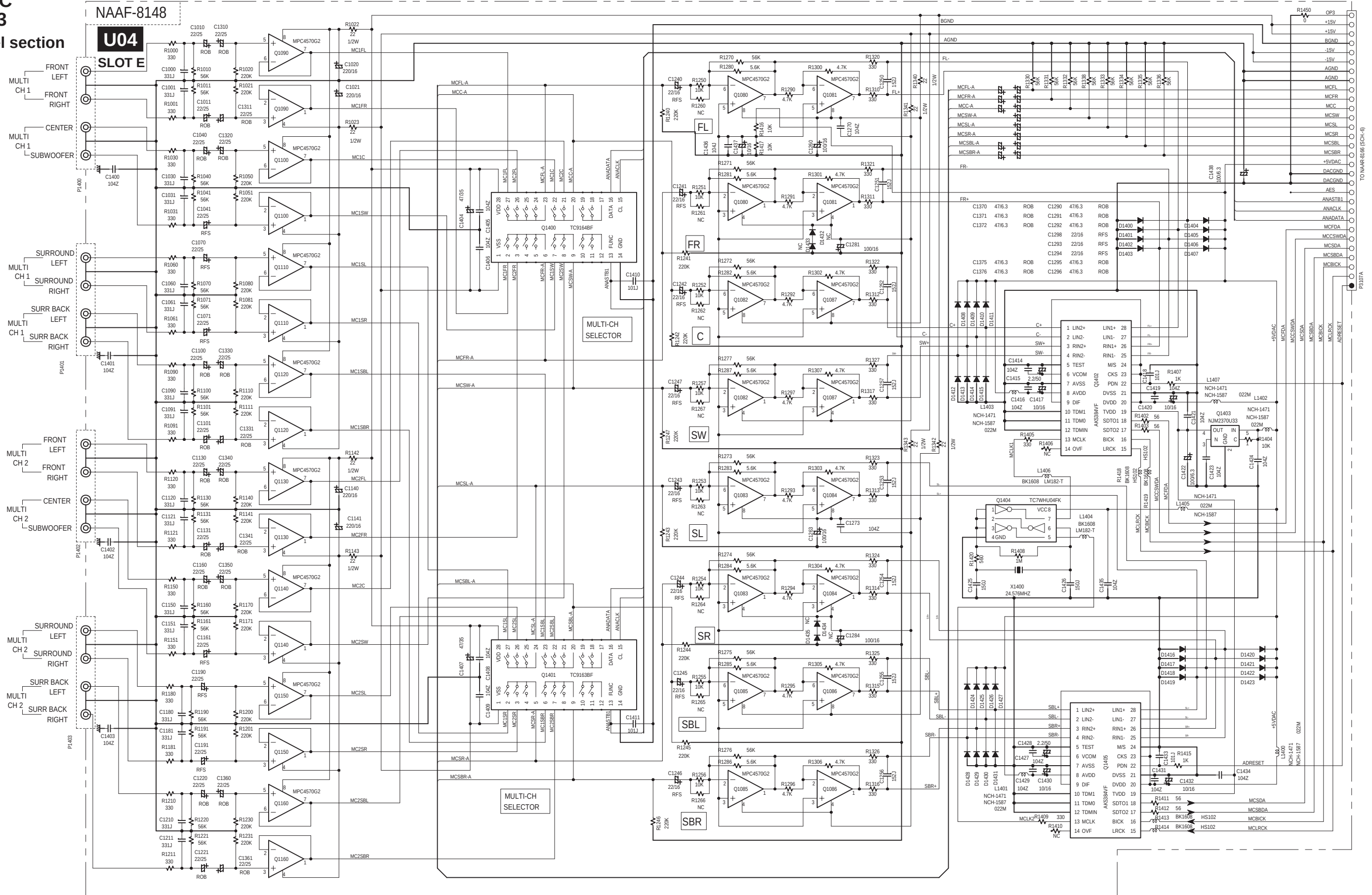
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SCHEMATIC
DIAGRAM 4
DAC and Second
PLL sections

U02

NAAR-8139(1/2)

P3106A

TO NAAR-8136 (SCH-8)

Q4880

Q4881

Q4882

Q4883

Q4884

Q4885

Q4886

Q4887

Q4888

Q4889

Q4890

Q4891

Q4892

Q4893

Q4894

Q4895

Q4896

Q4897

Q4898

Q4899

Q4900

Q4901

Q4902

Q4903

Q4904

Q4905

Q4906

Q4907

Q4908

Q4909

Q4910

Q4911

Q4912

Q4913

Q4914

Q4915

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Q4951

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Q4955

Q4956

Q4957

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Q5202

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Q5204

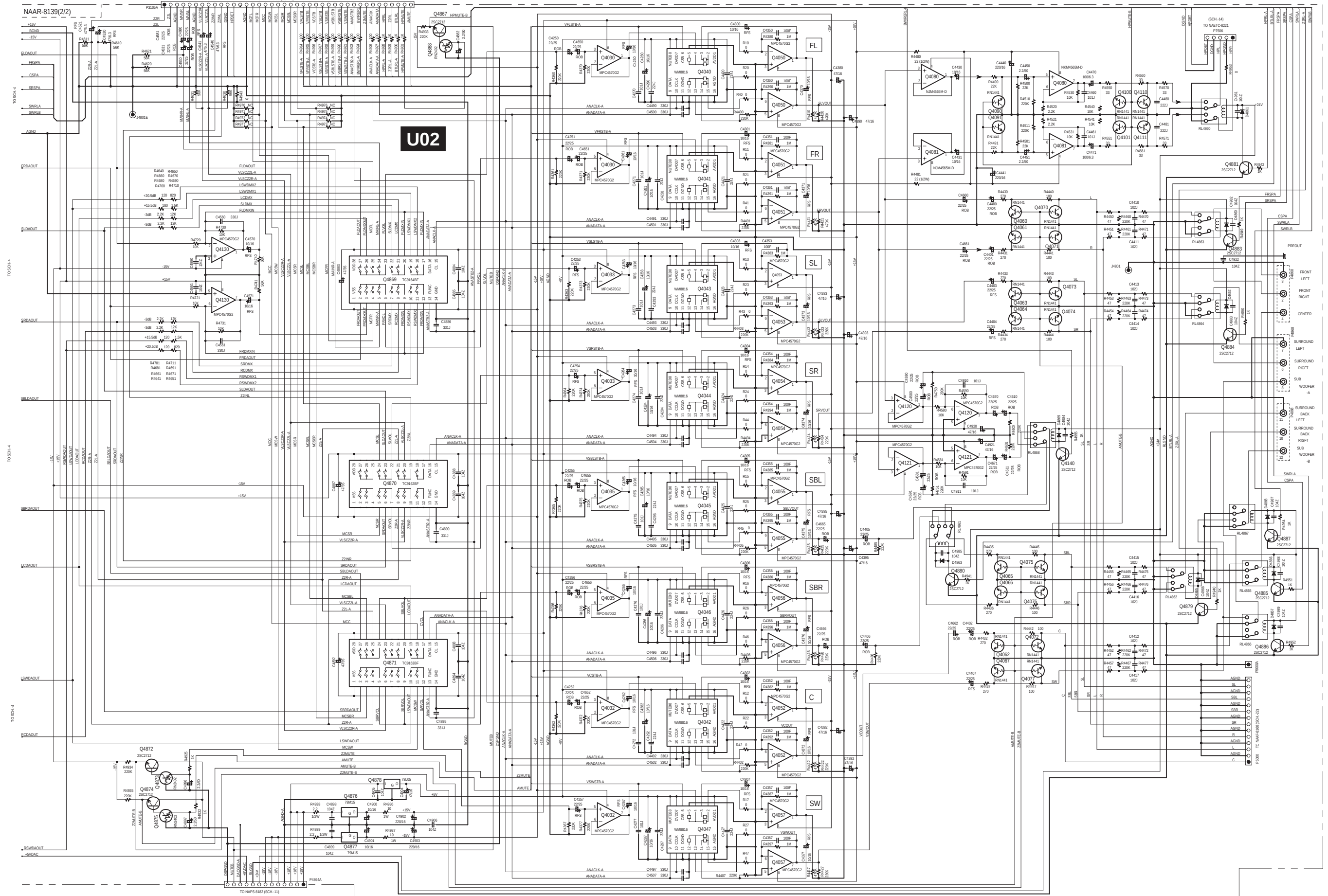
Q5205

Q5206

Q5

SCHEMATIC DIAGRAM 5

Preamplifier
section



SCHEMATIC DIAGRAM 6

Mother section

NAAR-8166

MAIN MICROPROCESSOR

Q3101

M3217F

RAM

Q3113

MX29LV160AT

Q3114

T7S32F

Q3115

T7S32F

Q3116

T7S32F

Q3117

T7S32F

Q3118

T7S32F

Q3119

T7S32F

Q3120

T7S32F

Q3121

T7S32F

Q3122

T7S32F

Q3123

T7S32F

Q3124

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Q3141

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Q3142

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Q3271

T7S32F

Q3272

T7S32F

Q3273

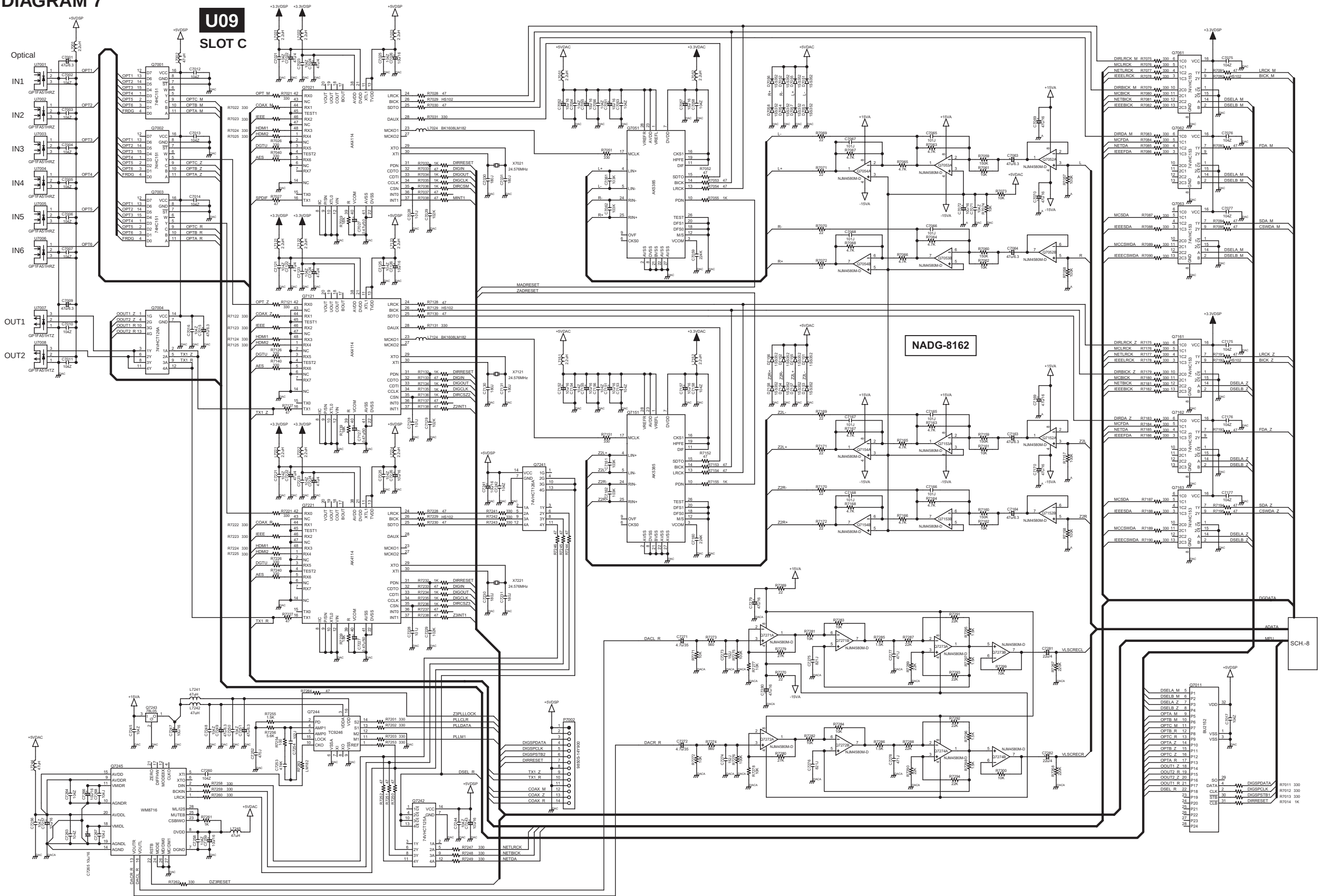
T7S32F

Q3274

T

SCHEAMTIC DIAGRAM 7

DIR section



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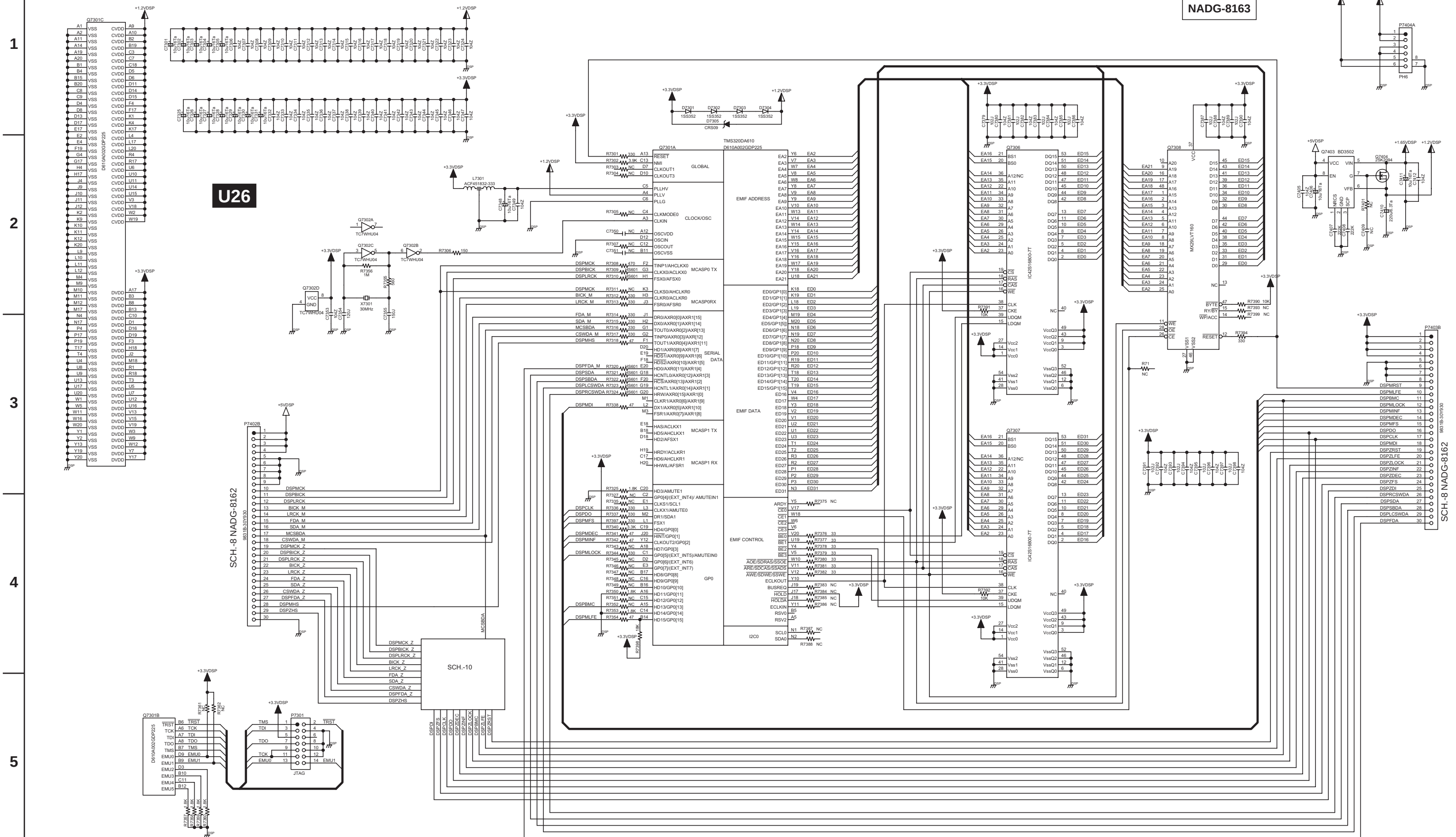
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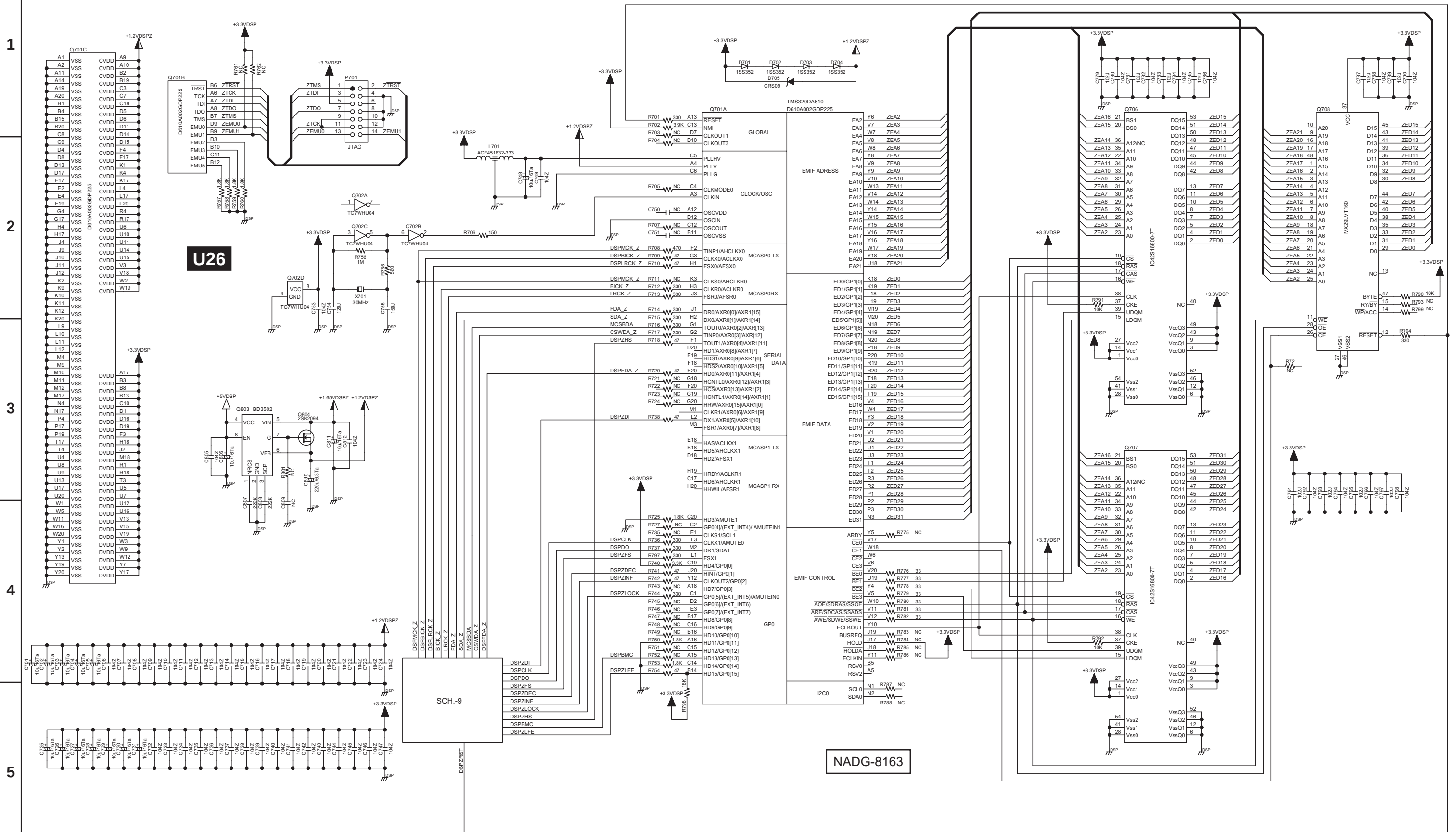


SCHEMATIC DIAGRAM 9

DSP section



DSP section



5



SCHEAMTIC DIAGRAM 12

Supply section

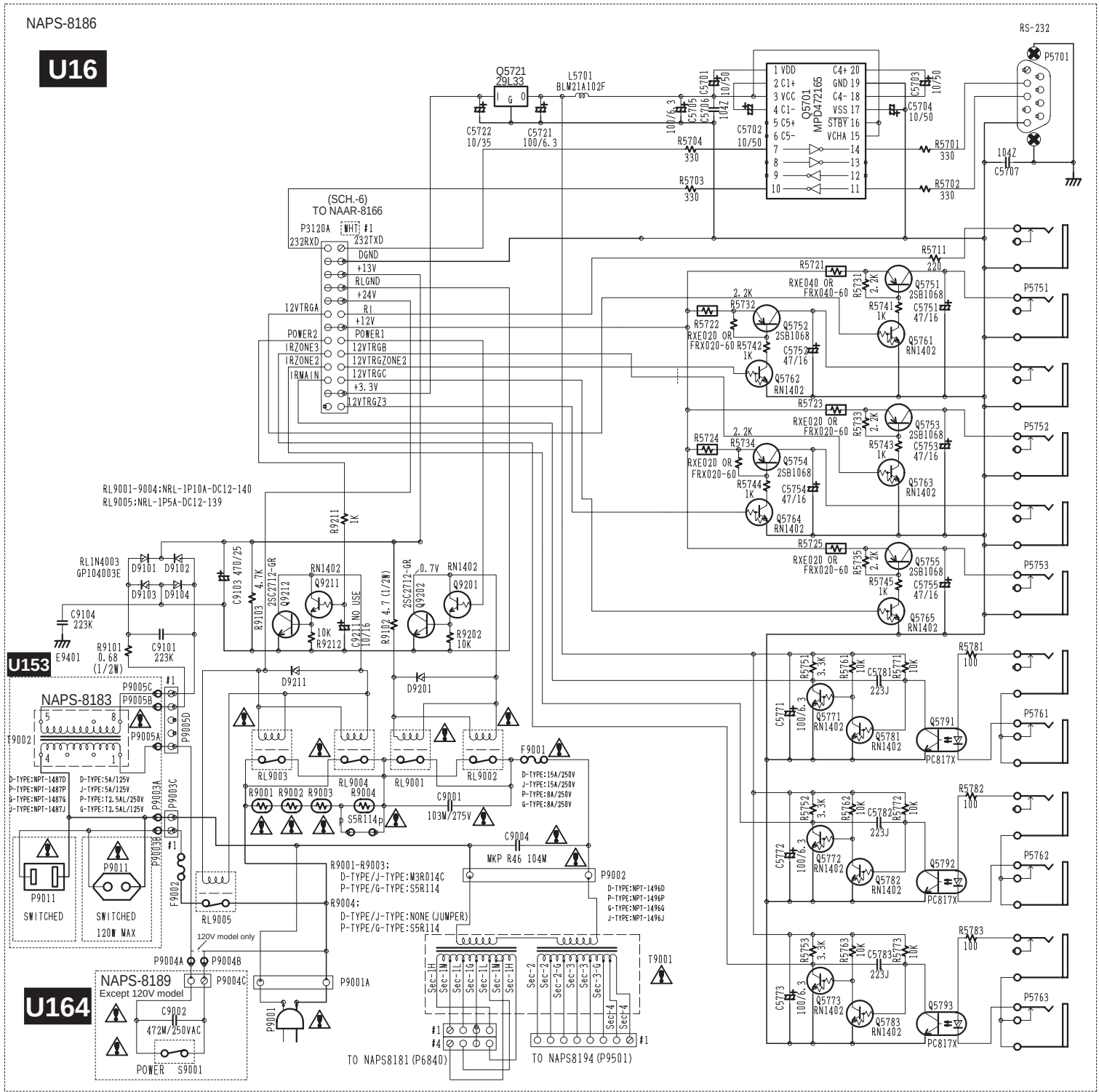
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NOTE

- THE COMPONENTS IDENTIFIED BY MARK  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLT METER)  IS DC VOLTAGE (NO INPUT SIGNAL).
- ELECTROLYTIC CAPACITORS  ARE IN μ F/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
EX) 030-30pF 330-33pF 331-330pF 333-0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
EX)  PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.



CAUTION
FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD, REPLACE
ONLY WITH FUSE OF SAME TYPE
AND RATING INDICATED.



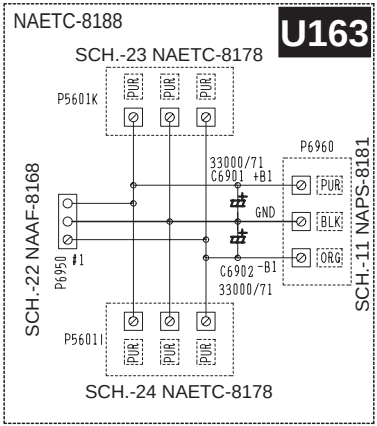
THIS SYMBOL LOCATED NEAR THE FUSE INDICATES
THAT THE FUSE USED IS SLOW OPERATING TYPE
FOR CONTINUED PROTECTION AGAINST FIRE
HAZARD, REPLACE WITH SAME TYPE FUSE. FOR FUSE
RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.



ATTENTION
AFIN D'ASSURER UNE PROTECTION
PERMANENTE CONTRE LES RISQUES
D'INCENDIE, REMPLACER UNIQUEMENT
PAR UN FUSIBLE DE MEME TYPE
ET CALIBRATION COMME INDIQUE.



CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST
E LENT. POUR UNE PROTECTION PERMANENTE, UTILISER
QUE DES FUSIBLES DE MEME TYPE. CE DERNIER EST
INDIQUE LA QU LE PRESENT SYMBOLE EST APPOSE.



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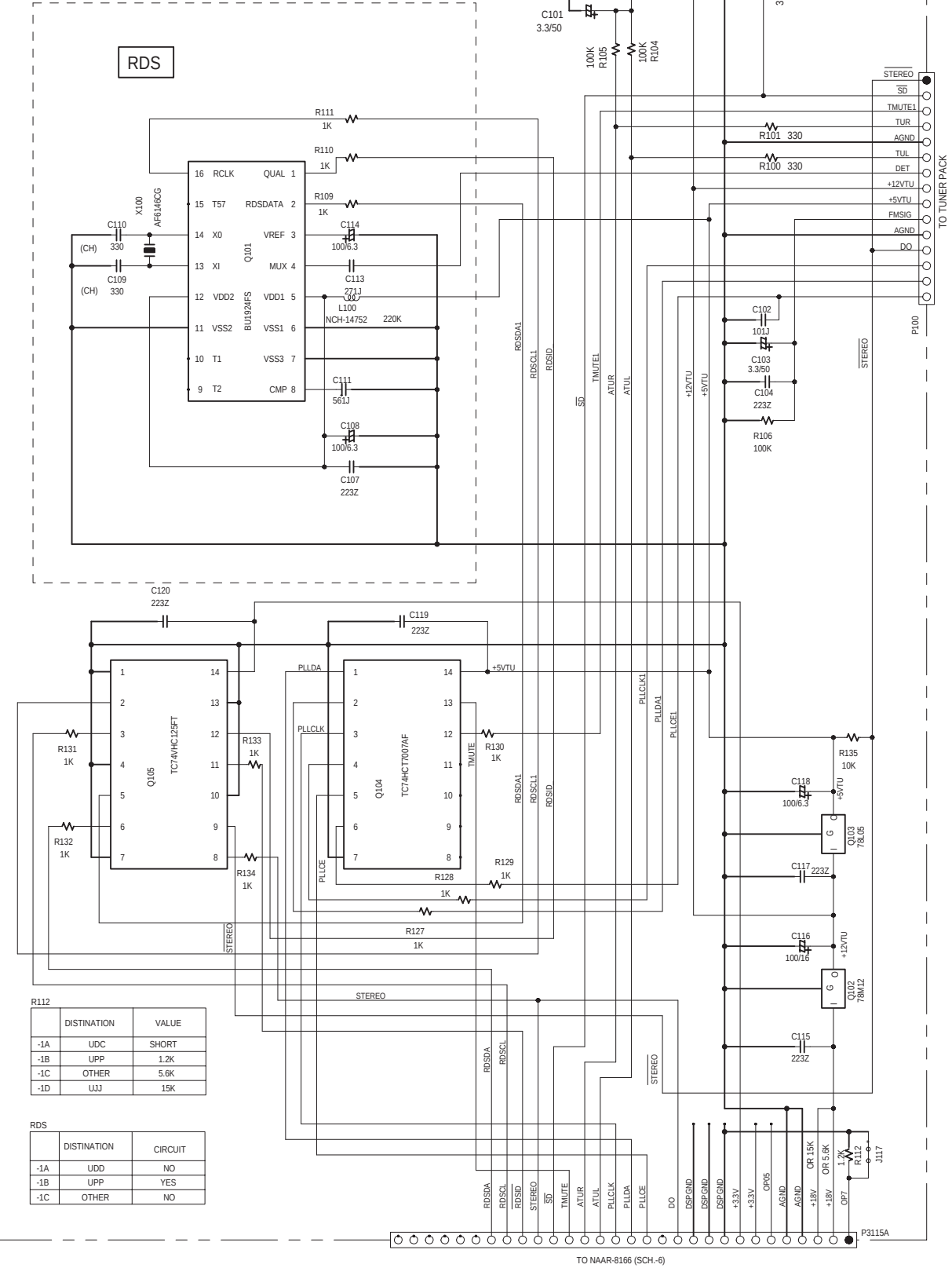
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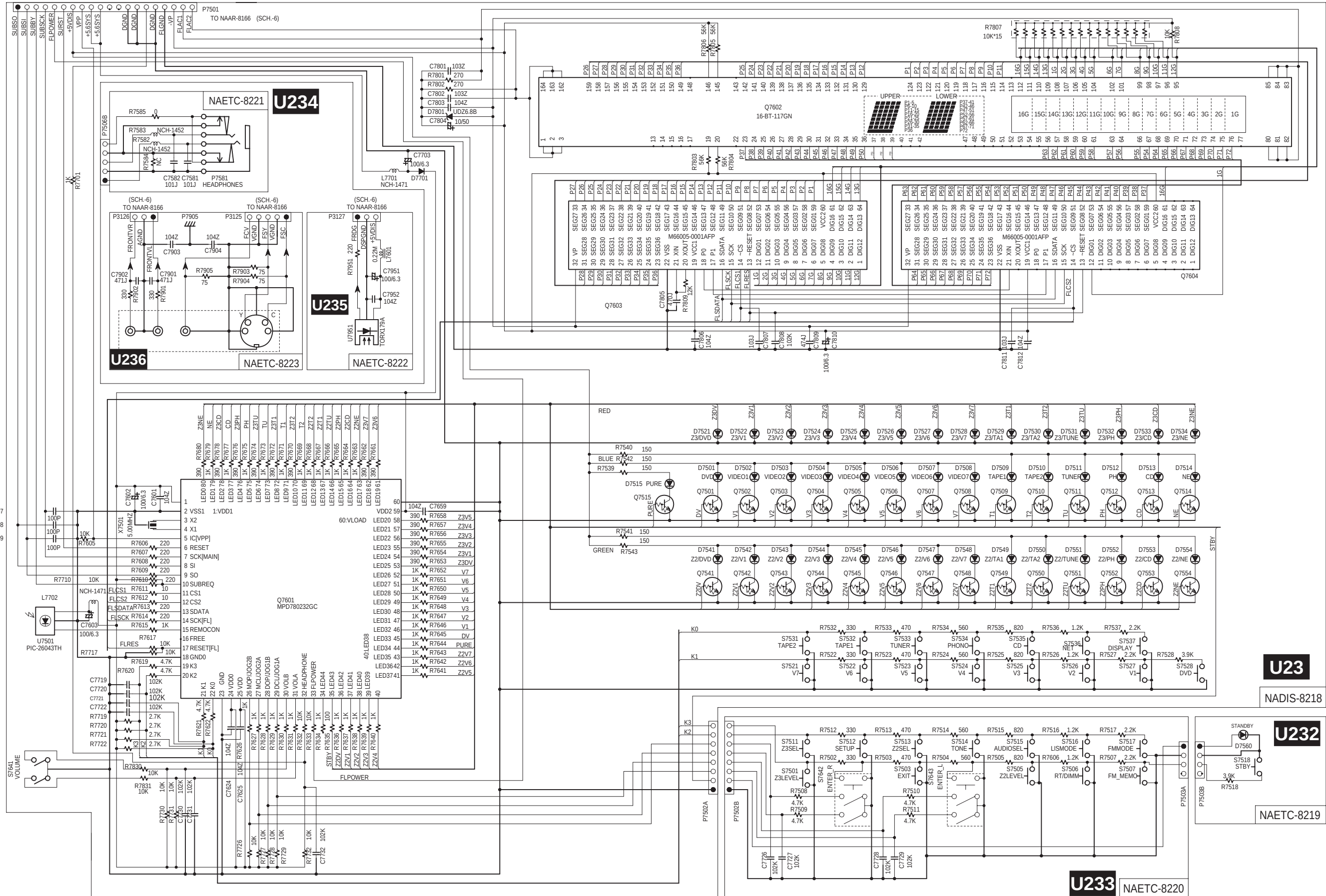


	DISTINATION	VALUE
-1A	UDC	SHORT
-1B	UPP	1.2K
-1C	OTHER	5.6K
-1D	UJJ	15K

RDS		
	DISTINATION	CIRCUIT
-1A	UDD	NO
-1B	UPP	YES
-1C	OTHER	NO

TO NAAR-8166 (SCH.-6)

03115A



SCHEMATIC DIAGRAM 15

NET-TUNE section

A

B

C

D

E

F

G

H

MultiMedia CPU

3.3V 2.5V Voltage Regulator

SLOT B

I²S

256fs

WakeUP

U24

NADG-8228

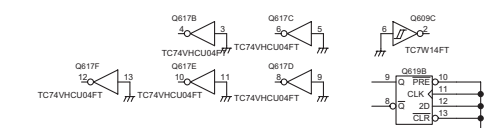
10BaseT EtherNet

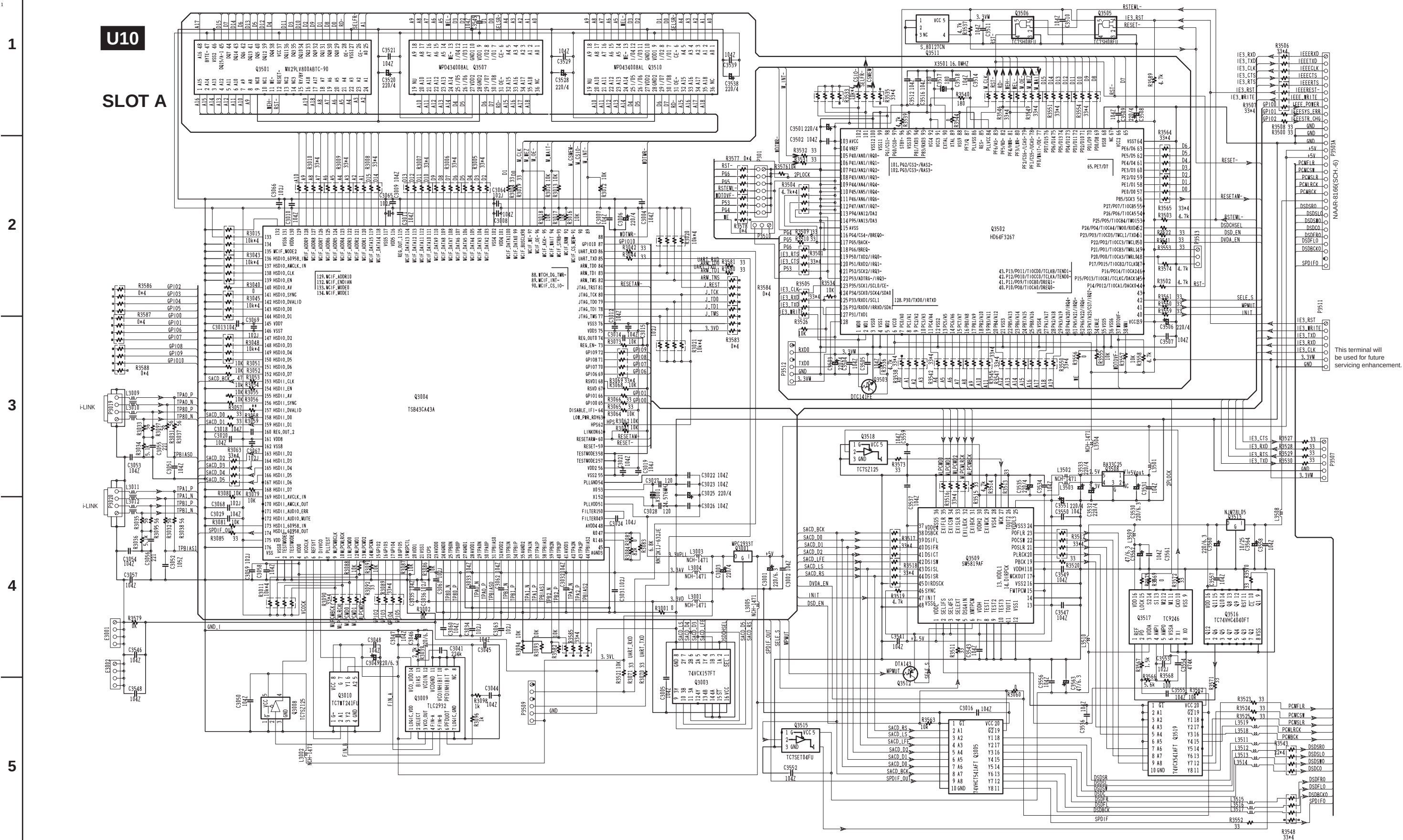
LINK
LAN

TO NAAR-8166(SCH-6)

P3102E

P3102F







U01
NAVI
8137

NAVD-8202



SCHEMATIC DIAGRAM 20 Video section (Except USA and Canadian models)

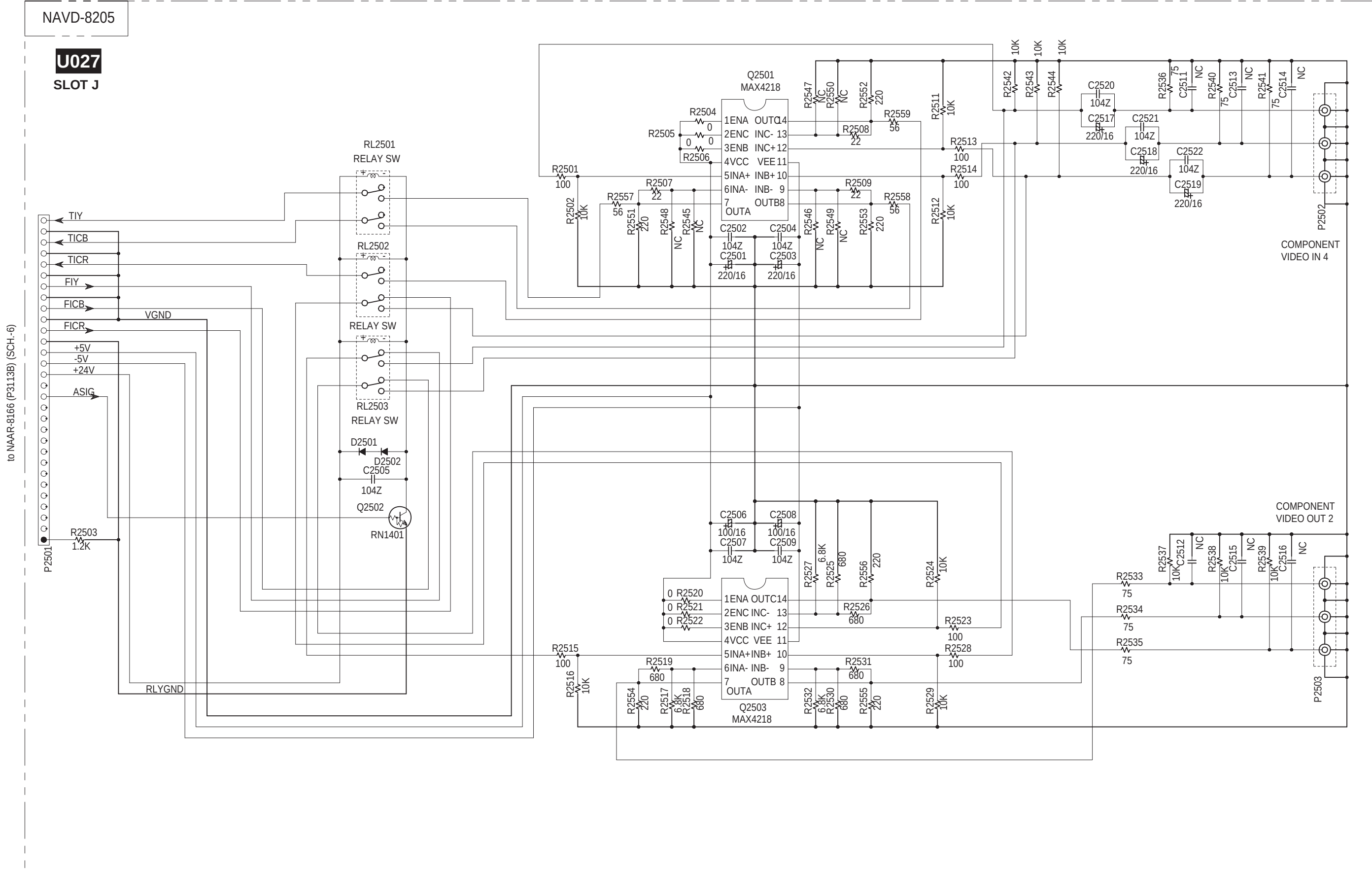
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SCHEMATIC DIAGRAM 21 Component video section (USA and Canadian models)

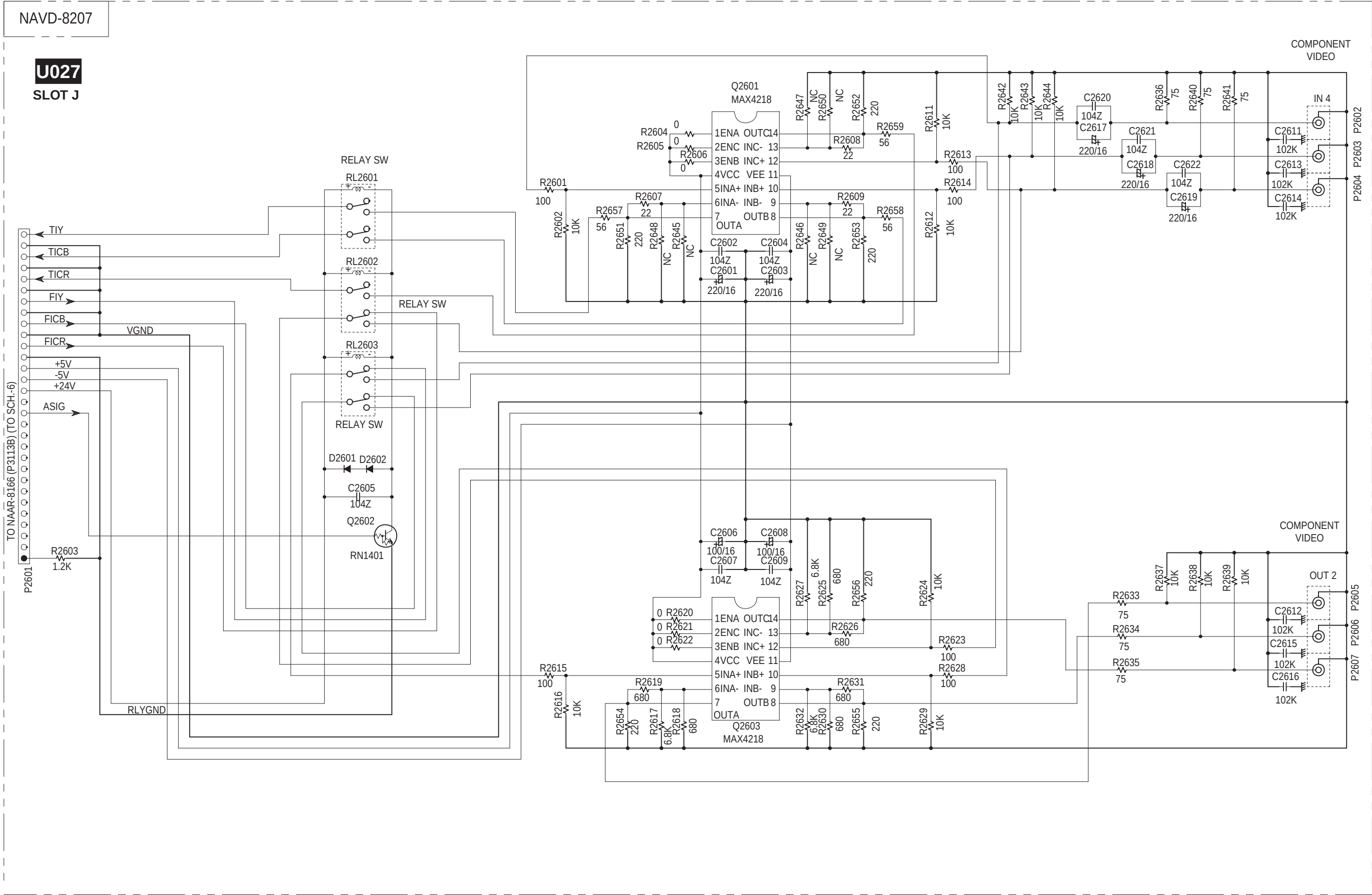
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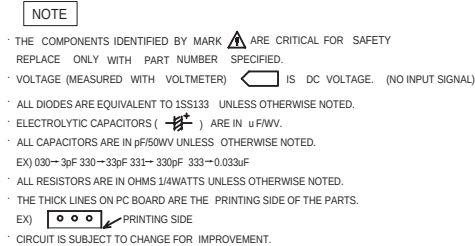
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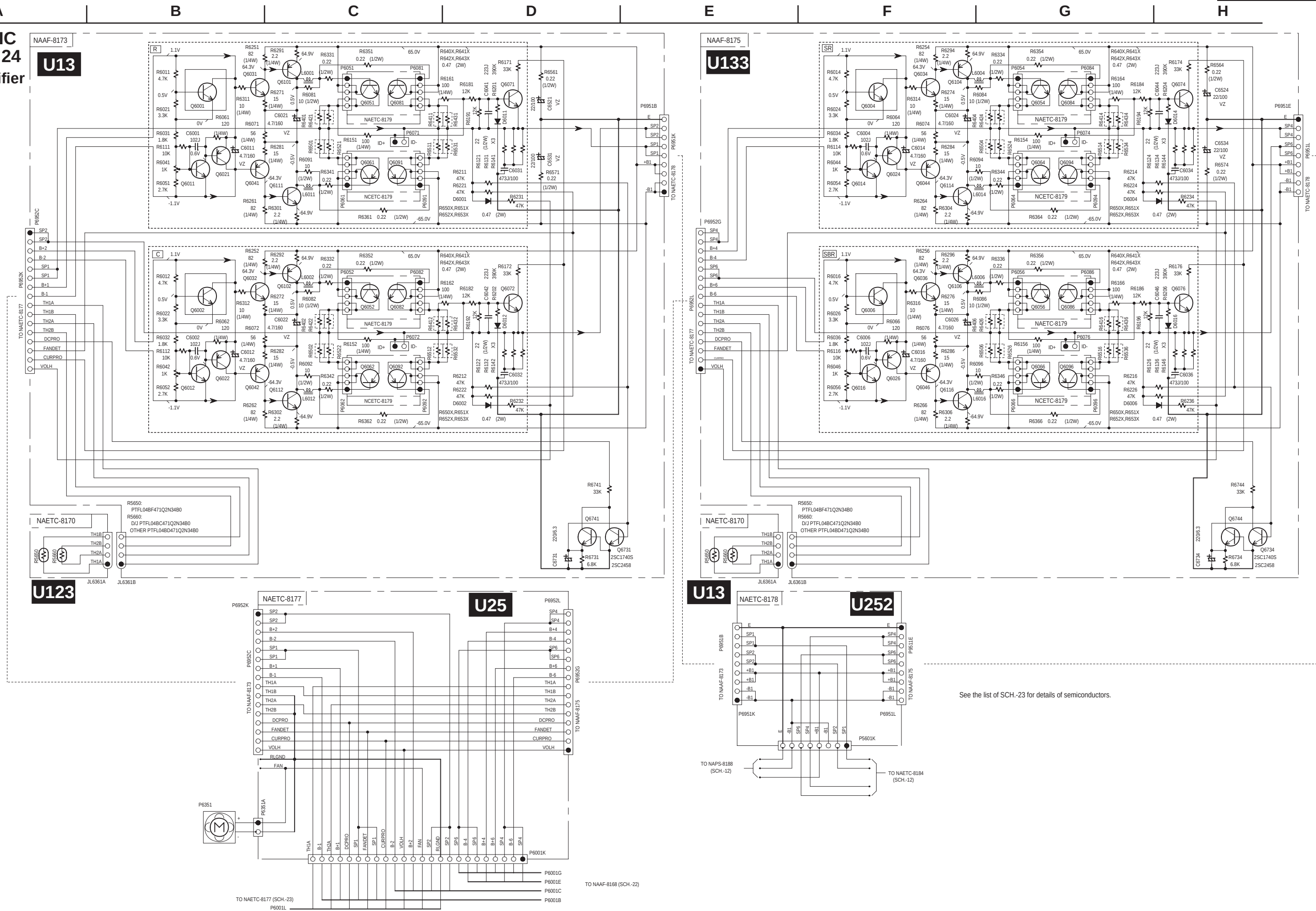
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SCHEMATIC DIAGRAM 24

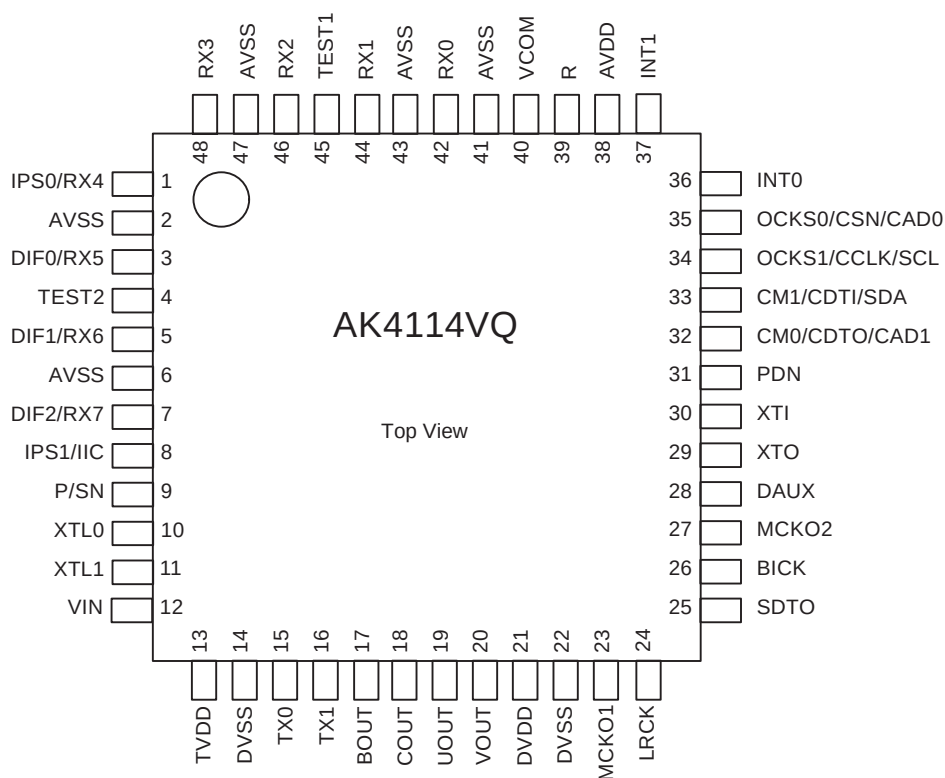
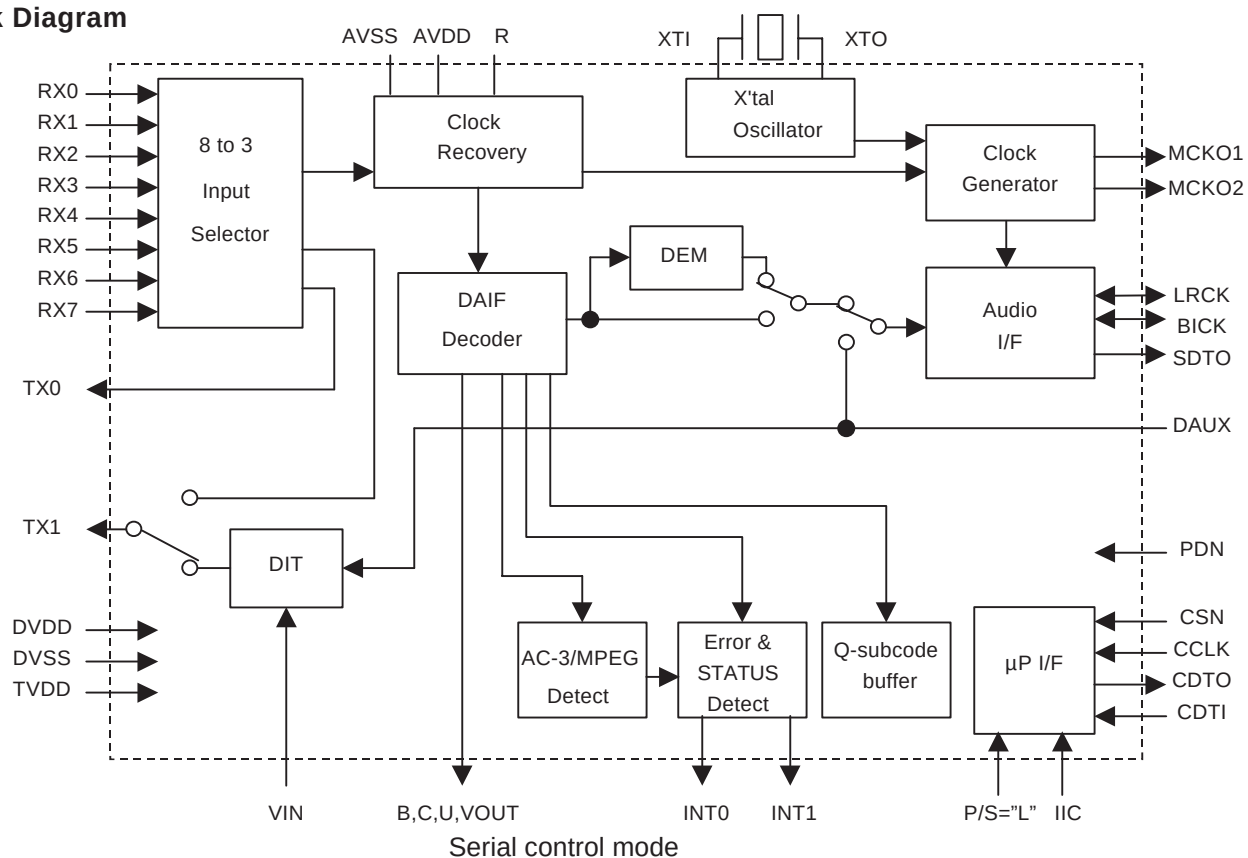
Power amplifier section



IC BLOCK DIAGRAM AND DESCRIPTION

AK4114VQ(192kHz 24bit Digital Audio Interface Transceiver)

Block Diagram



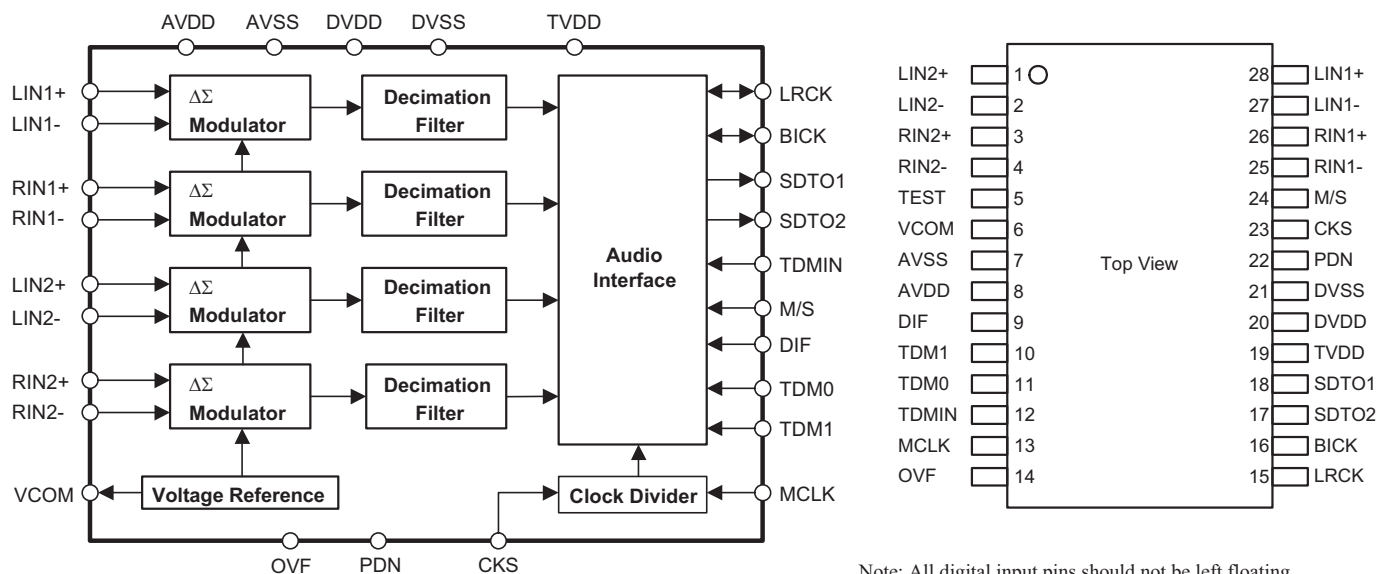
IC BLOCK DIAGRAM AND DESCRIPTION

AK4114VQ(192kHz 24bit Digital Audio Interface Transceiver)

No.	Symbol	I/O	Function
1	RX4	I	Receiver channel input 4 pin
2	NC(AVSS)	I	No connection pin
3	RX5	I	Receiver channel input 5 pin
4	TEST2	I	Test 2 pin
5	RX6	I	Receiver channel input 6 pin
6	NC(AVSS)	I	No connection pin
7	RX7	I	Receiver channel input 7 pin
8	IIC	I	IIC select pin. L:4 lines serial
9	P/SN	I	Parallel/serial select pin. L: Serial mode
10	XTL0	I	Crystal frequency select 0 pin
11	XTL1	I	Crystal frequency select 1 pin
12	VIN	I	V bit input pin for transmitter output.
13	TVDD	I	Power supply pin for input buffer
14	NC	I	No connection pin
15	TX0	O	Transmitter channel output 0 pin
16	TX1	O	Transmitter channel output 1 pin
17	BOUT	O	Block start output pin for receiver input
18	COUT	O	C bit output pin for receiver input
19	UOUT	O	U bit output pin for receiver input
20	VOUT	O	V bit output pin for receiver input
21	DVDD	I	Digital power supply pin
22	DVSS	I	Digital ground pin
23	MCKO1	O	Master clock output 1 pin
24	LRCK	I/O	Channel clock pin
25	SDTO	O	Audio serial data output pin
26	BICK	I/O	Audio serial data clock pin
27	MCKO2	O	Master clock output 2 pin
28	DAUX	I	Axially audio serial data input pin
29	XTO	O	Crystal output pin
30	XTI	I	Crystal input pin
31	PDN	I	Power down and reset pin
32	CDTO	O	Control data output pin
33	CDTI	I	Control data input pin
34	CCLK	I	Control data clock pin
35	CSN	I	Chip select pin
36	INT0	O	Interrupter 0 pin
37	INT1	O	Interrupter 1 pin
38	AVDD	I	Analog power supply
39	R	-	External connection resistor pin
40	VCOM	-	Common voltage output pin
41	AVSS	I	Analog ground pin
42	RX0	I	Receiver channel input 0 pin
43	NC(AVSS)	I	No connection pin
44	RX1	I	Receiver channel input 1 pin
45	TEST1	I	Test 1 pin
46	RX2	I	Receiver channel input 2 pin
47	NC(AVSS)	I	No connection pin
48	RX3	I	Receiver channel input 3 pin

IC BLOCK DIAGRAM AND DESCRIPTION

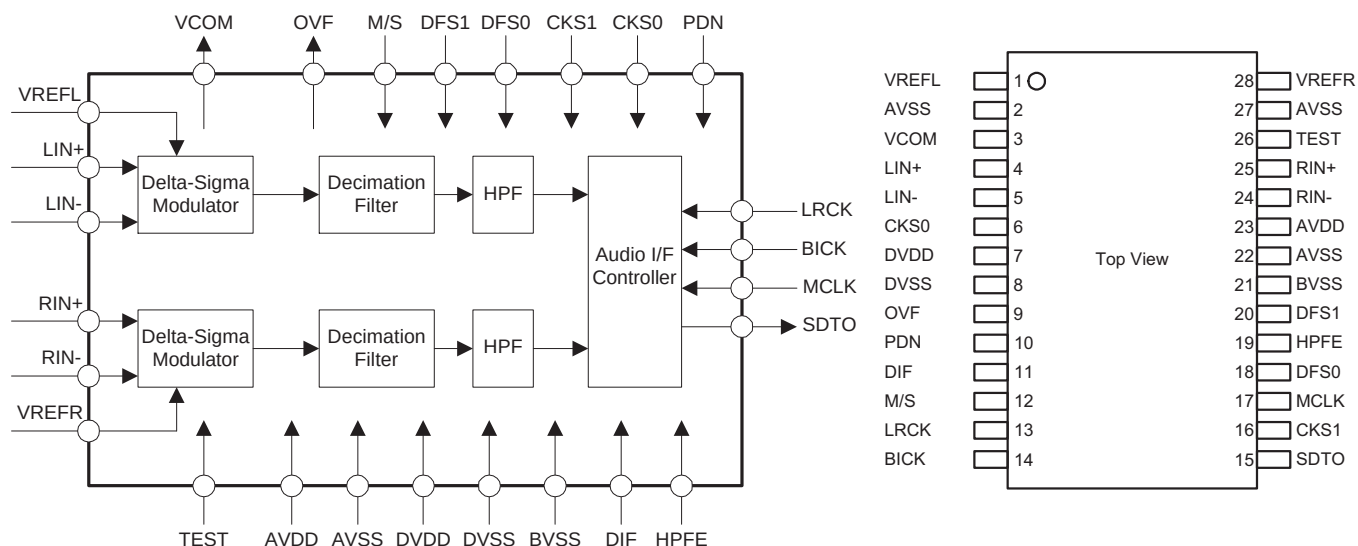
AK4584VF(107dB 24-Bit 96kHz 4-Channel SDC)



No.	Pin Name	I/O	Function
1	LIN2+	I	ADC2 Lch Positive Analog Input Pin
2	LIN2-	I	ADC2 Lch Negative Analog Input Pin
3	RIN2+	I	ADC2 Rch Positive Analog Input Pin
4	RIN2-	I	ADC2 Rch Negative Analog Input Pin
5	TEST	I	Test Pin (Connected to AVSS)
6	VCOM	O	Common Voltage Output Pin, AVDD/2 Normally connected to AVSS with a 0.1μF ceramic capacitor in parallel with an electrolytic capacitor less than 2.2μF.
7	AVSS	-	Analog Ground Pin
8	AVDD	-	Analog Power Supply Pin, 4.75 ~ 5.25V
9	DIF	I	Audio Interface Format Pin “L” : 24bit MSB justified, “H” : 24bit I ² S Compatible
10	TDM1	I	TDM I/F BICK Frequency Select Pin “L” : 256fs, “H” : 128fs
11	TDM0	I	TDM I/F Format Enable Pin “L” : Normal Mode, “H” : TDM Mode
12	TDMIN	I	TDM Data Input Pin
13	MCLK	I	Master Clock Input Pin
14	OVF	O	Analog Input Overflow Detect Pin This pin goes to “H” if one of four analog inputs overflows.
15	LRCK	I/O	Output Channel Clock Pin “L” Output in Master Mode at Power-down mode.
16	BICK	I/O	Audio Serial Data Clock Pin “L” Output in Master Mode at Power-down mode.
17	SDTO2	O	ADC2 Audio Serial Data Output Pin “L” Output at Power-down mode.
18	SDTO1	O	ADC1 Audio Serial Data Output Pin “L” Output at Power-down mode.
19	TVDD	-	Output Buffer Power Supply Pin, 3.0 ~ 5.25V
20	DVDD	-	Digital Power Supply Pin, 4.75 ~ 5.25V
21	DVSS	-	Digital Ground Pin
22	PDN	I	Power-Down Mode Pin When “L”, the circuit is in power-down mode. The AK5384 should always be reset upon power-up.
23	CKS	I	Master Clock Select Pin “L” : 256fs, “H” : 512fs This pin is enabled in Master Mode.
24	M/S	I	Master / Slave Mode Pin “L” : Slave Mode, “H” : Master Mode
25	RIN1-	I	ADC1 Rch Negative Analog Input Pin
26	RIN1+	I	ADC1 Rch Positive Analog Input Pin
27	LIN1-	I	ADC1 Lch Negative Analog Input Pin
28	LIN1+	I	ADC1 Lch Positive Analog Input Pin

IC BLOCK DIAGRAM AND DESCRIPTION

AK4585AVF(24-Bit 192kHz $\Delta\Sigma$ ADC)

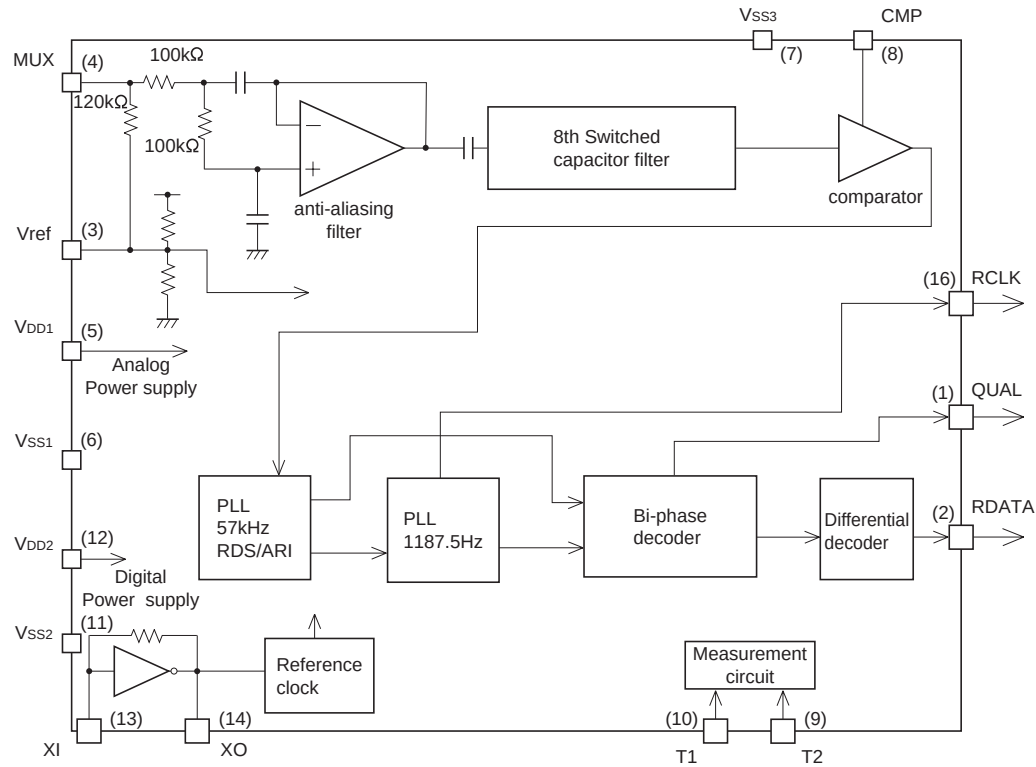


No.	Pin Name	I/O	Function
1	VREFL	I	Lch Voltage Reference Input Pin, AVDD Normally, connected to AVSS with a 10 μ F electrolytic capacitor and a 0.1 μ F ceramic capacitor.
2	AVSS	-	Analog Ground Pin
3	VCOM	O	Common Voltage Output Pin, AVDD/2 Bias voltage of ADC input.
4	LIN+	I	Lch Analog Positive Input Pin
5	LIN-	I	Lch Analog Negative Input Pin
6	CKS0	I	Master Clock Select 0 Pin (Internal Pull-down Pin, typ. 100k Ω)
7	DVDD	-	Digital Power Supply Pin, 3.0 ~ 5.25V
8	DVSS	-	Digital Ground Pin
9	OVF	O	Analog Input Overflow Detect Pin This pin goes to "H" if analog input overflows.
10	PDN	I	Power Down Mode Pin "H": Power up, "L": Power down
11	DIF	I	Audio Interface Format Pin "H": 24bit I ² S Compatible, "L": 24bit MSB justified
12	M/S	I	Master / Slave Mode Pin (Fixed to "L") "L": Slave Mode only
13	LRCK	I	Output Channel Clock Pin
14	BICK	I	Audio Serial Data Clock Pin
15	SDTO	O	Audio Serial Data Output Pin
16	CKS1	I	Master Clock Select 1 Pin (Internal Pull-down Pin, typ. 100k Ω)
17	MCLK	I	Master Clock Input Pin
18	DFS0	I	Sampling Speed Select 0 Pin
19	HPFE	I	High Pass Filter Enable Pin "H": Enable, "L": Disable
20	DFS1	I	Sampling Speed Select 1 Pin
21	BVSS	-	Substrate Ground Pin
22	AVSS	-	Analog Ground Pin
23	AVDD	-	Analog Power Supply Pin, 4.75 ~ 5.25V
24	RIN-	I	Rch Analog Negative Input Pin
25	RIN+	I	Rch Analog Positive Input Pin
26	TEST	I	Test Pin (Internal Pull-down Pin, typ. 100k Ω)
27	AVSS	-	Analog Ground Pin
28	VREFR	I	Rch Voltage Reference Input Pin, AVDD Normally, connected to AVSS with a 10 μ F electrolytic capacitor and a 0.1 μ F ceramic capacitor.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS

BU1924FS (RDS Decoder) <European model only>

BLOCK DIAGRAM

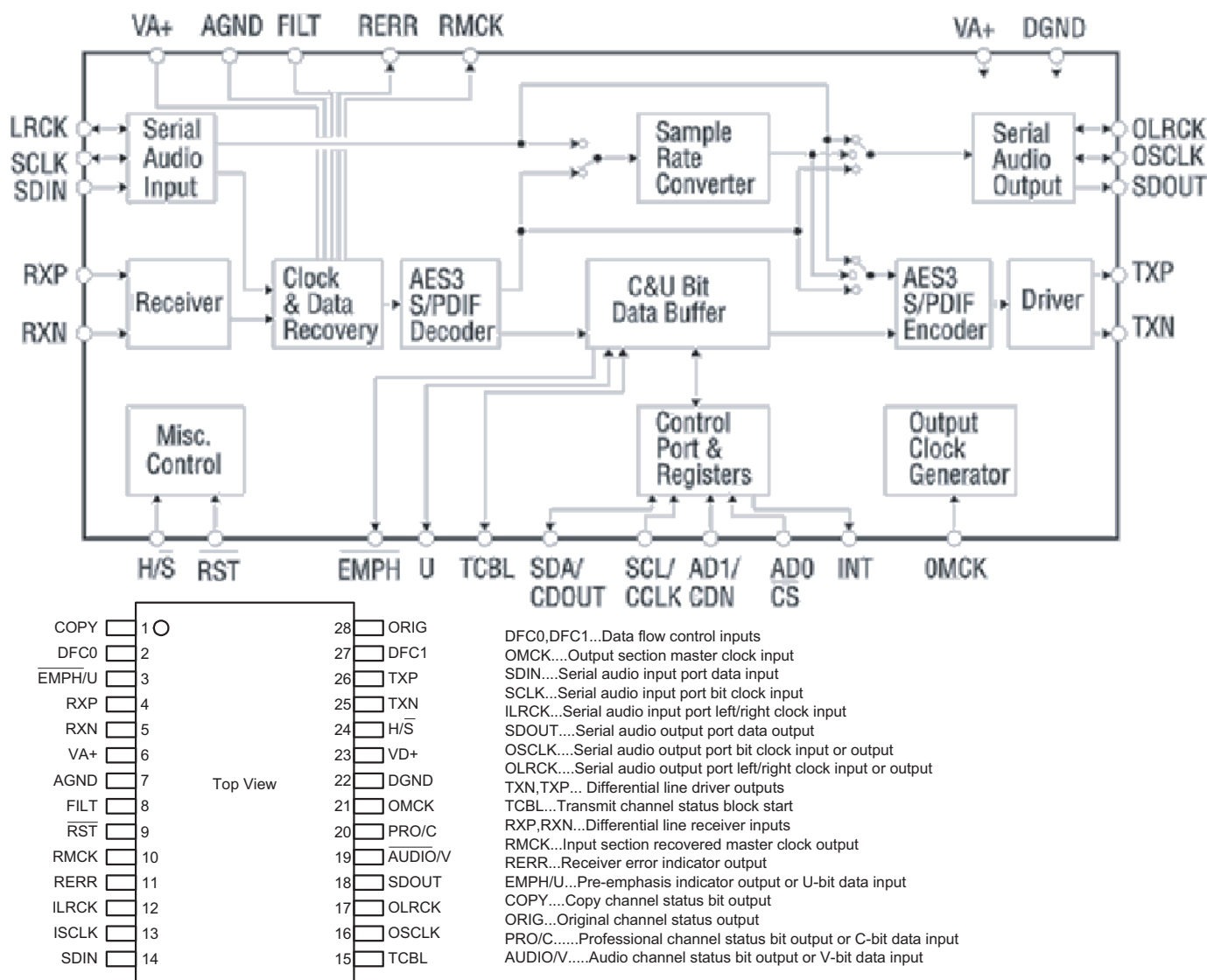


TERMINAL DESCRIPTION

Pin No.	Pin name	Description
1	QUAL	Output terminal of demodulator quality signal.
2	RDATA	Output terminal of demodulator data.
3	Vref	Input terminal of reference voltage.
4	MUX	Input terminal of composite signal.
5	VDD1	Analog power supply.
6	VSS1	Analog power supply.
7	VSS3	Ground.
8	CMP	Input terminal of comparator.
9	T2	Input terminal for test mode.
10	T1	Input terminal for test mode.
11	VSS2	Digital power supply.
12	VDD2	Digital power supply.
13	XI	Connect to oscillator.
14	XO	Connect to oscillator.
15	(N.C.)	---
16	RCLK	Output terminal of demodulator clock.

IC BLOCK DIAGRAM AND DESCRIPTION

CS8420(Digital audio sample rate converter)

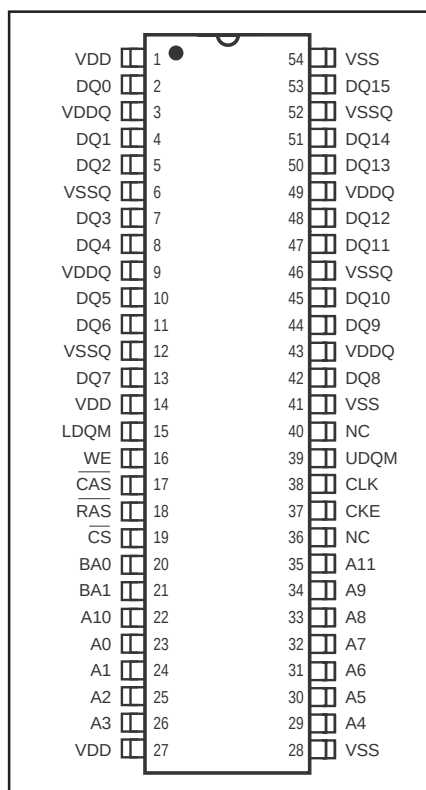


IC BLOCK DIAGRAM AND DESCRIPTION

IC42S16800-7T(2Mx8 bitsx4 banks Synchronous Dynamic RAM)

PIN CONFIGURATIONS

54-Pin TSOP-2 (IC42S16800)

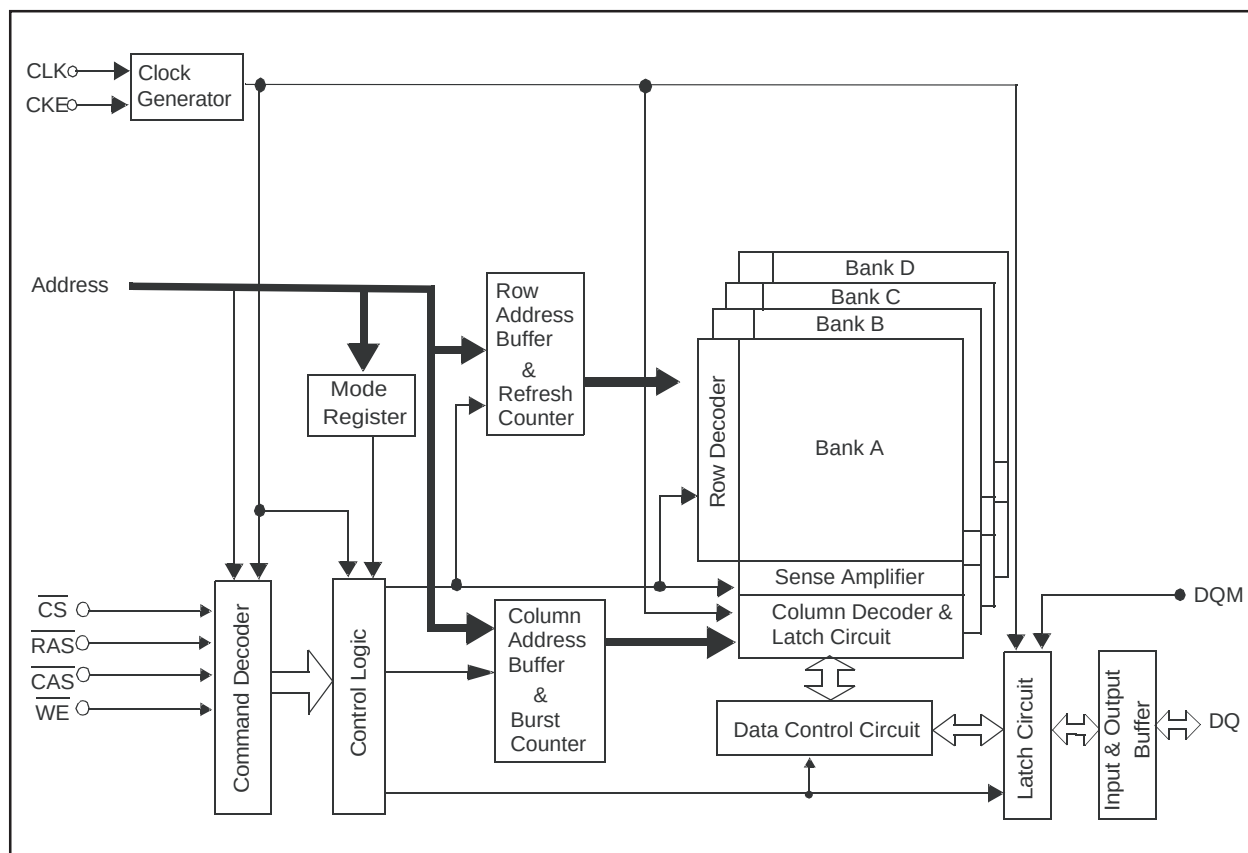


PIN DESCRIPTIONS

Pin Name	Function
CLK	Master Clock
CKE	Clock Enable
CS	Chip Select
RAS	Row Address Strobe
CAS	Column Address Strobe
WE	Write Enable
DQ0 ~ DQ15	Data I/O

Pin Name	Function
DQM	DQ Mask Enable
A0-11	Address Input
BA0,1	Bank Address
V _{DD}	Power Supply
V _{DDQ}	Power Supply for DQ
V _{SS}	Ground
V _{SSQ}	Ground for DQ

FUNCTIONAL BLOCK DIAGRAM



IC BLOCK DIAGRAM AND DESCRIPTION

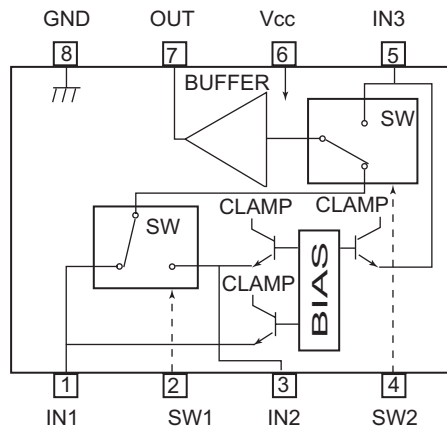
IC42S16800-7T(2Mx8 bitsx4 banks Synchronous Dynamic RAM)

PIN FUNCTIONS

Symbol	Type	Function (In Detail)
CLK	Input Pin	Master Clock: Other inputs signals are referenced to the CLK rising edge
CKE	Input Pin	Clock Enable: CKE HIGH activates, and CKE LOW deactivates internal clock signals, device input buffers and output drivers. Deactivating the clock provides PRECHARGE POWER-DOWN and SELF REFRESH operation (all banks idle), or ACTIVE POWER-DOWN (row ACTIVE in any bank).
CS	Input Pin	Chip Select: CS enables (registered LOW) and disables (registered HIGH) the command decoder. All commands are masked when CS is registered HIGH. CS provides for external bank selection on systems with multiple banks. CS is considered part of the command code.
RAS, CAS, WE	Input Pin	Command Inputs: RAS, CAS and WE (along with CS) define the command being entered.
A0-A11	Input Pin	Address Inputs: Provide the row address for ACTIVE commands, and the column address and AUTO PRECHARGE bit for READ/WRITE commands, to select one location out of the memory array in the respective bank. The row address is specified by A0-A11. The column address is specified by A0-A8 (IC42S16800)
BA0,BA1	Input Pin	Bank Address Inputs: BA0 and BA1 define to which bank an ACTIVE, READ, WRITE or PRECHARGE command is being applied.
DQM, UDQM ,LDQM	Input Pin	Din Mask / Output Disable: When DQM is high in burst write, Din for the current cycle is masked. When DQM is is high in burst read, Dout is disable at the next but one cycle.
DQ0 to DQ15	I/O Pin	Data Input / Output: Data bus.
V _{DD} , V _{SS}	Power Supply Pin	Power Supply for the memory array and peripheral circuitry.
V _{DDQ} , V _{SSQ}	Power Supply Pin	Power Supply are supplied to the output buffers only.

IC BLOCK DIAGRAM AND DESCRIPTION

MM1117XFBE(3 inputs/1 output video switch)



Control Input Truth Table

SW1	SW2	OUT
L	L	IN1
H	L	IN2
-	H	IN3

IC BLOCK DIAGRAM AND DESCRIPTION

MX29LV160BBTC-70(16Mbit CMOS single voltage 3V only flash memory)

PIN CONFIGURATIONS

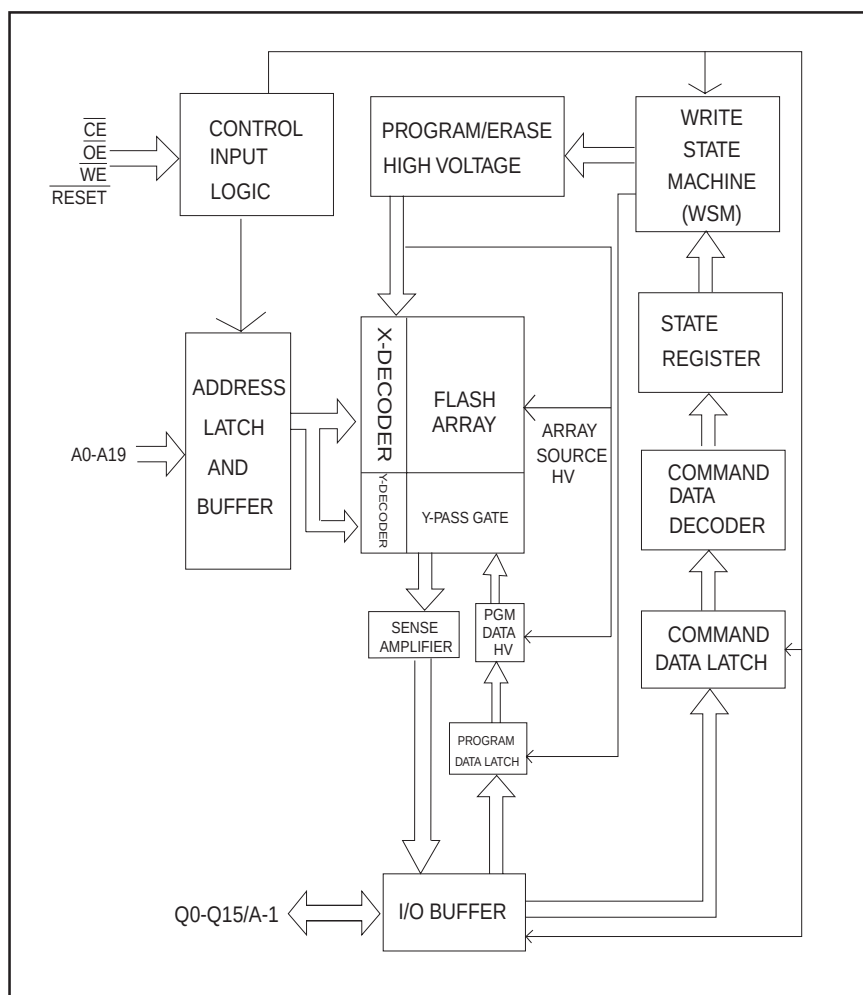
48 TSOP (Standard Type) (12mm x 20mm)



PIN DESCRIPTION

SYMBOL	PIN NAME
A0~A19	Address Input
Q0~Q14	Data Input/Output
Q15/A-1	Q15(Word mode)/LSB addr(Byte mode)
$\overline{\text{CE}}$	Chip Enable Input
$\overline{\text{WE}}$	Write Enable Input
BYTE	Word/Byte Selection input
$\overline{\text{RESET}}$	Hardware Reset Pin/Sector Protect Unlock
$\overline{\text{OE}}$	Output Enable Input
RY/BY	Ready/Busy Output
VCC	Power Supply Pin (2.7V~3.6V)
GND	Ground Pin

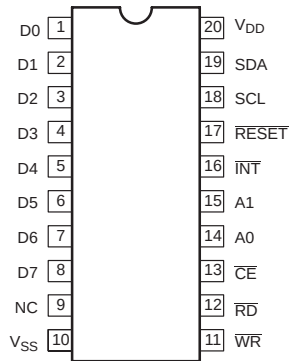
BLOCK DIAGRAM



IC BLOCK DIAGRAM AND DESCRIPTION

PCA9564PW(Parallel bus to I²C-bus controller)

PIN CONFIGURATION ♂ SO, TSSOP



PIN CONFIGURATION

PIN NUMBER		SYMBOL	PIN TYPE	NAME AND FUNCTION
SO, TSSOP	HVQFN			
1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 18, 19, 20	D0±D7	I/O	Data Bus: Bi-directional 3-State data bus used to transfer commands, data and status between the controller and the CPU. D0 is the least significant bit.
9	6	NC		No connect: must be left floating
10	7	V _{SS}	Pwr	Ground
11	8	WR	I	Write Strobe: When LOW and CE is also LOW, the contents of the data bus is loaded into the addressed register. The transfer occurs on the rising edge of the signal.
12	9	RD	I	Read Strobe: When LOW and CE is also LOW, causes the contents of the addressed register to be presented on the data bus. The read cycle begins on the falling edge of RD.
13	10	CE	I	Chip Enable: Active-LOW input signal. When LOW, data transfers between the CPU and the controller are enabled on D0±D7 as controlled by the WR, RD and A0±A1 inputs. When HIGH, places the D0±D7 lines in the 3-State condition.
14, 15	11, 12	A0, A1	I	Address Inputs: Selects the controller internal registers and ports for read/write operations.
16	13	INT	O	Interrupt Request: Active-LOW, open-drain, output. This pin requires a pull-up device.
17	14	RESET	I	Reset: A LOW level clears internal registers resets the I ² C state machine.
18	15	SCL	I/O	I ² C-bus serial clock input/output (open-drain).
19	16	SDA	I/O	I ² C-bus serial data input/output (open-drain).
20	17	V _{DD}	Pwr	Power Supply: +2.3 to +3.6 V

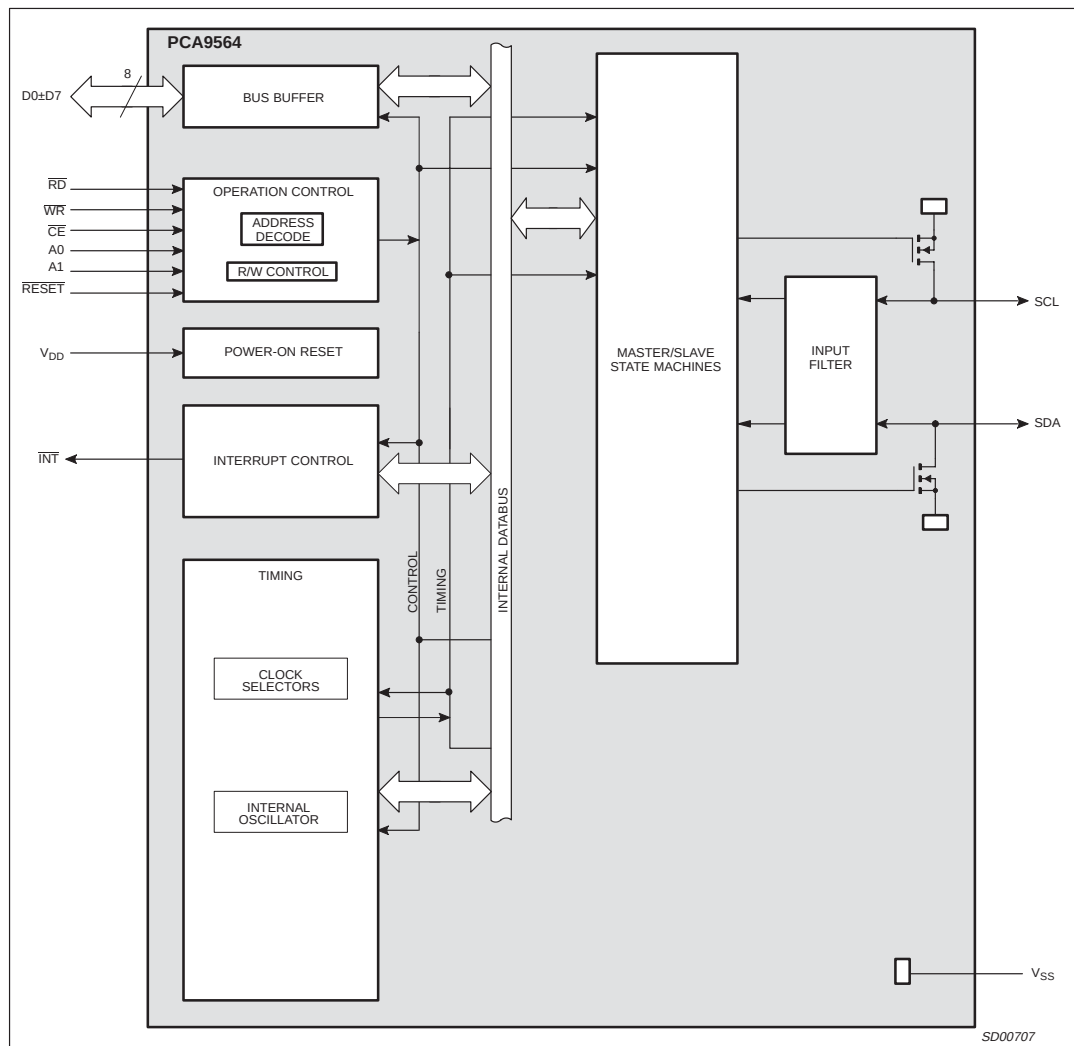
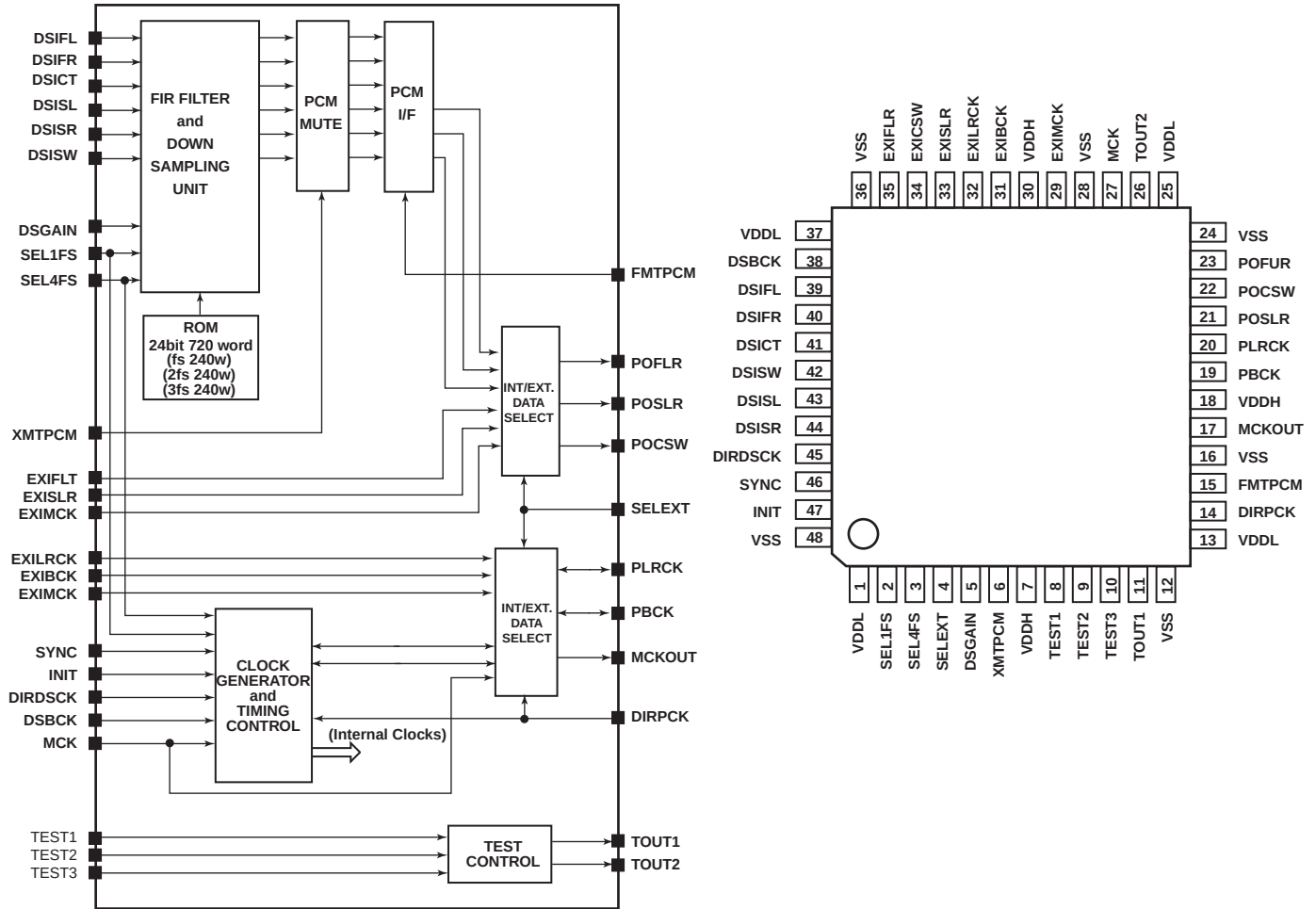


Figure 1. Block diagram

IC BLOCK DIAGRAM AND DESCRIPTION

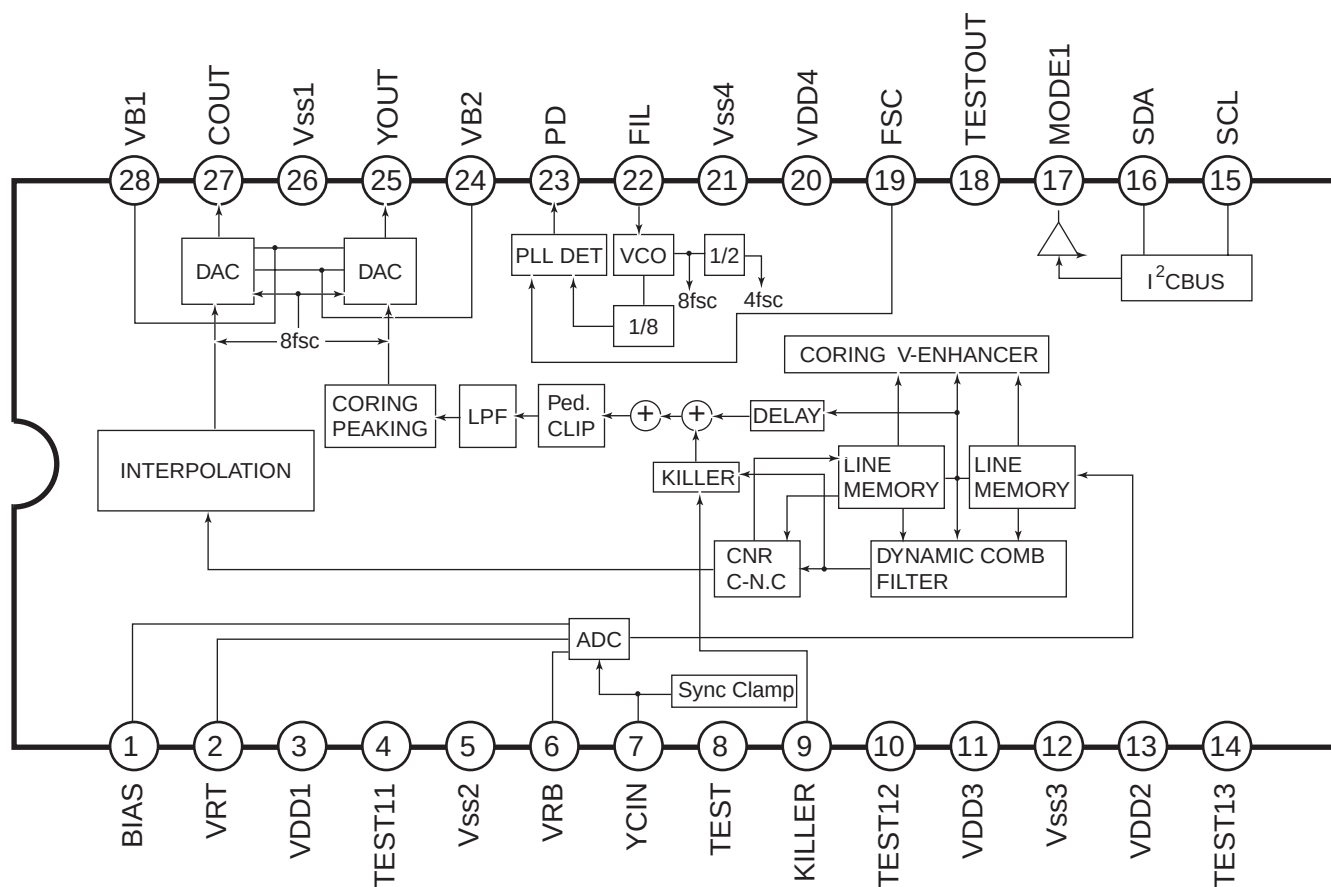
SM5819AF(6-channel DSD-PCM converter)



No.	Name	I/O	Description	No.	Name	I/O	Description
1	VDDL	-	Core power supply	25	VDDL	-	Core power supply
2	SEL1FS	I	PCM output rate select 1	26	TOUT2	O	Test output 2
3	SEL4FS	I	PCM output rate select 2	27	MCKOUT	O	Master clock input: 512fs (22.5792MHz, fs=44.1kHz)
4	SELEXT	I	fs/2fs/4fs output and external data output select	28	VSS	I	Ground
5	DSGAIN	I	OSD signal gain setting	29	EXIMCK	-	External system clock input
6	XMTPCM	I	PCM output mute control input	30	VDDH	-	I/O power supply
7	VDDH	-	I/O power supply	31	EXIBCK	I	External PCM data BCK bit clock input
8	TEST1	I	Test input 1	32	EXILRCK	I	External PCM data LRCK word clock input
9	TEST2	I	Test input 2	33	EXISLR	I	External PCM data input: surround left/right channel
10	TEST3	I	Test input 3	34	EXICSW	I	External PCM data input: center/subwoofer channel
11	TOUT1	O	Test output 1	35	EXIFLR	I	External PCM data input: front left/right channel
12	VSS	-	Ground	36	VSS	-	Ground
13	VDDL	-	Core power supply	37	VDDL	-	Core power supply
14	DIRPCK	I	PCM output PBCK/PLRCK I/O select	38	DSBCK	I/O	DSD data input bit clock. Controlled by DIRDSC.
15	FMTPCM	I	PCM output format select	39	DSIFL	I	DSD data input: front left-channel
16	VSS	-	Ground	40	DSIFR	I	DSD data input: front right-channel
17	MCKOUT	O	System clock output	41	DSICT	I	DSD data input: center-channel
18	VDDH	-	I/O power supply	42	DSISW	I	DSD data input: front subwoofer-channel
19	PBCK	I/O	PCM output BCK bit clock	43	DSISL	I	DSD data input: surround left-channel
20	PLRCK	I/O	PCM output LRCK word clock input	44	DSISR	I	DSD data input: surround right-channel
21	POSLR	O	PCM data output: surround right/left channel	45	DIRDSC	I	DSBCK I/O select
22	POCSW	O	PCM data output: center/subwoofer channel	46	SYNC	I	Forced synchronization input.
23	POFLR	O	PCM data output: front right/left channel	47	INIT	I	Initialization input. Active-LOW. Resync on "L" → "H"
24	VSS	O	Ground	48	VSS	-	Ground

IC BLOCK DIAGRAM AND DESCRIPTION

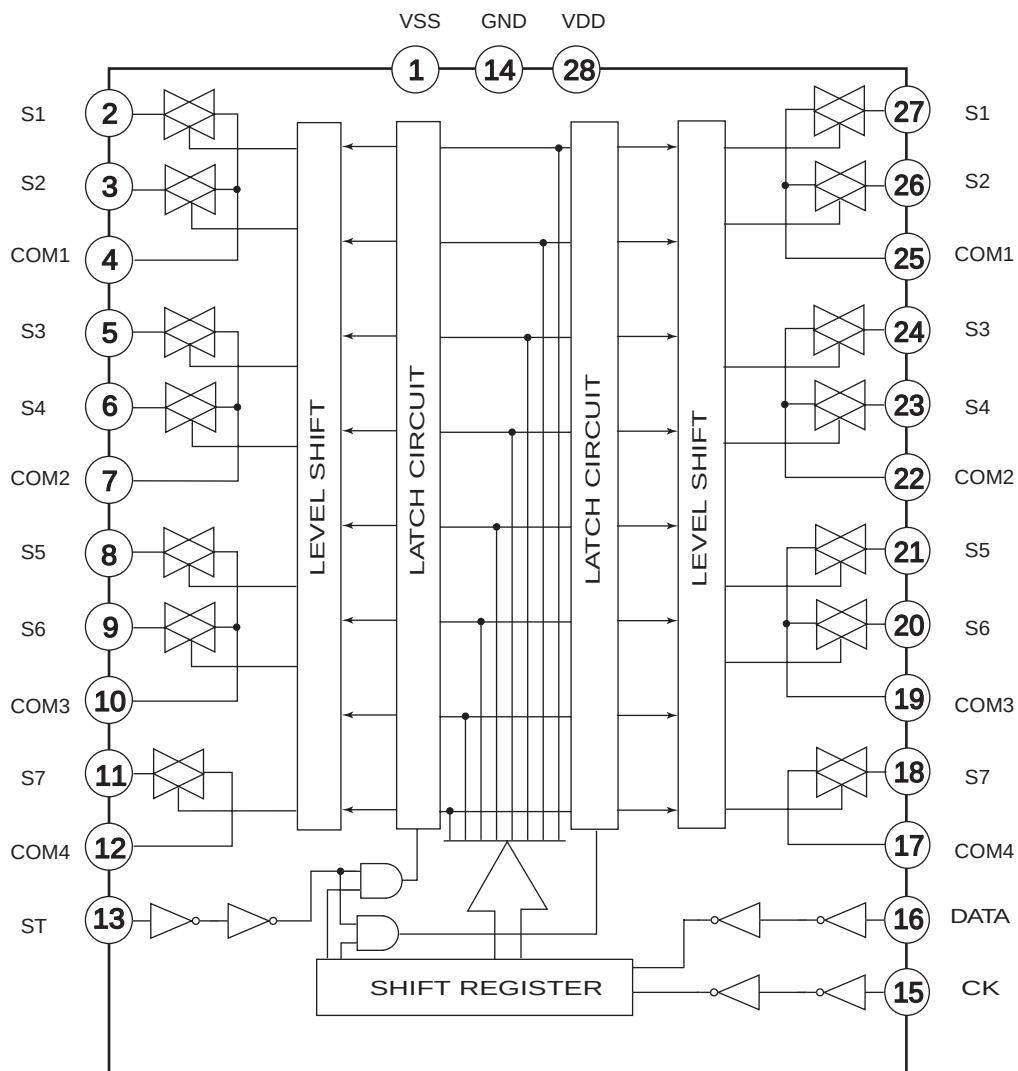
TC90A69F(3-lines digital COM filter)



Pin	Symbol	Function	Pin	Symbol	Function
1	BIAS	Bias for ADC	15	SCL	Clock input of I ² C Bus
2	VRT	Maximum bias of D range for ADC	16	SDA	Data input/output of I ² C Bus
3	VDD1	Analog supply for ADC/DAC	17	MODE1	Mode 1 output
4	TEST1	Test input	18	TESTOUT	Test output
5	VSS2	Analog ground supply for ADC	19	FSC	Clock input of I ² C Bus
6	VRB	Minimum bias of D range for ADC	20	VDD4	Analog supply for PLL
7	YCIN	Video signal input	21	VSS4	Analog ground supply for PLL
8	TEST	Reset control and test control of initializing	22	FIL	VCO control
9	KILLER	Y/C separation and vertical enhancer off control	23	PD	PLL detection output
10	TEST2	Test input	24	VB2	Bias 2 for DAC
11	VDD3	Digital supply for logic	25	YOUT	Brightness signal output
12	VSS3	Digital ground supply for Logic/DRAM	26	VSS1	Analog ground for DAC
13	VDD2	Digital supply for DRAM	27	COUT	Color signal output
14	TEST3	Test input	28	VB1	Bias 1 for DAC

IC BLOCK DIAGRAM AND DESCRIPTION

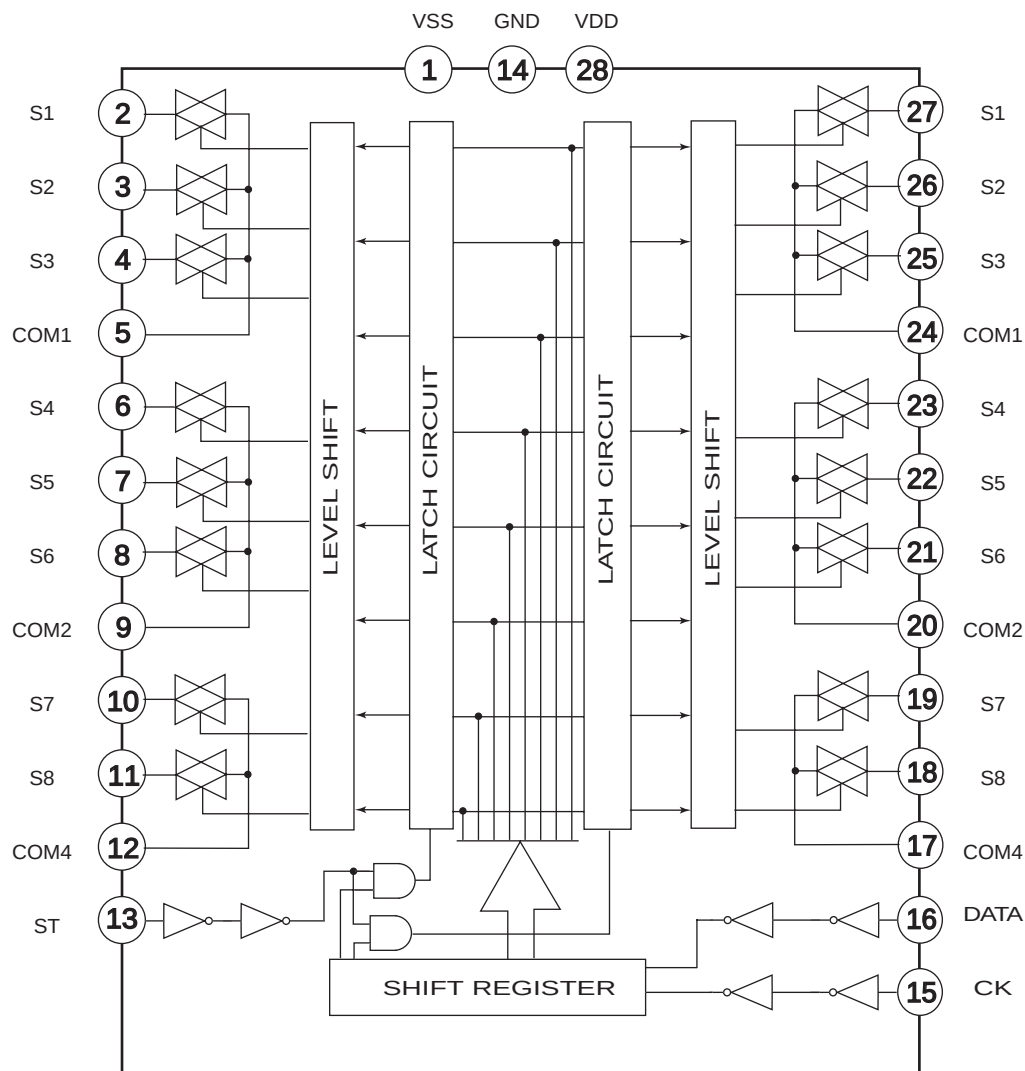
TC9162BFG(Function Switch)



Pin No.	Symbol	Function
1	VSS	Negative power supply
14	GND	Ground
28	VDD	Positive power supply
2,3,5,6,8,9,11	S1~S7	Input/output terminals
27,26,24,23,21,20,18	S1~S7	Input/output terminals
4,7,10,12	COM1 ~COM4	Common terminals
25,22,19,17	COM1 ~COM4	Common terminals
13	ST	Strobe input terminal for data reading
15	C K	Clock input terminal for data transfer
16	D A T A	Data input terminal for switch

IC BLOCK DIAGRAM AND DESCRIPTION

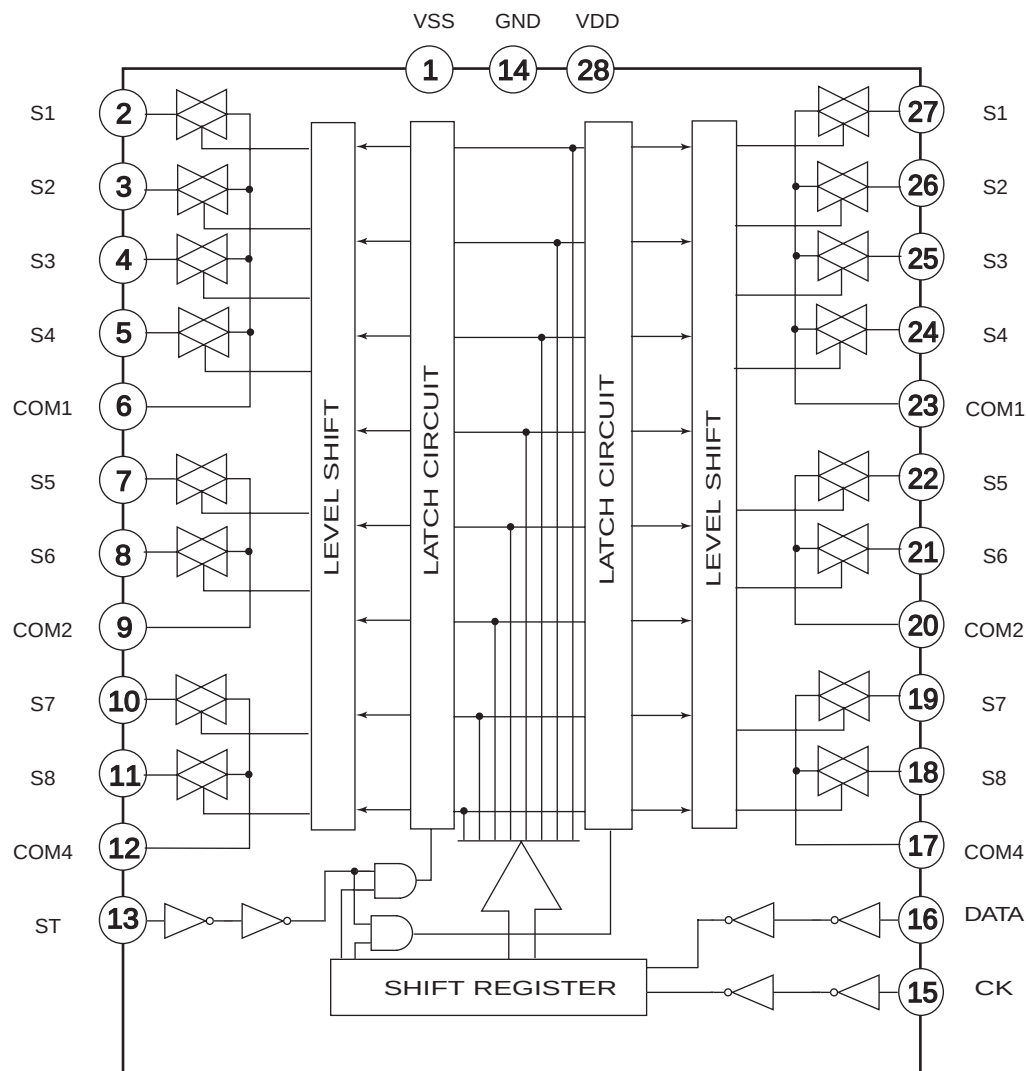
TC9163BFG(Function Switch)



Pin No.	Symbol	Function
1	Vss	Negative power supply
14	GND	Ground
28	VDD	Positive power supply
2,3,4,6,7,8,10,11	S1~S8	Input/output terminals
27,26,25,23,22,21,18,17	S1~S8	Input/output terminals
5,9,12	COM1 ~ COM3	Common terminals
24,20,17	COM1 ~ COM3	Common terminals
13	ST	Strobe input terminal for data reading
15	C K	Clock input terminal for data transfer
16	DATA	Data input terminal for switch

IC BLOCK DIAGRAM AND DESCRIPTION

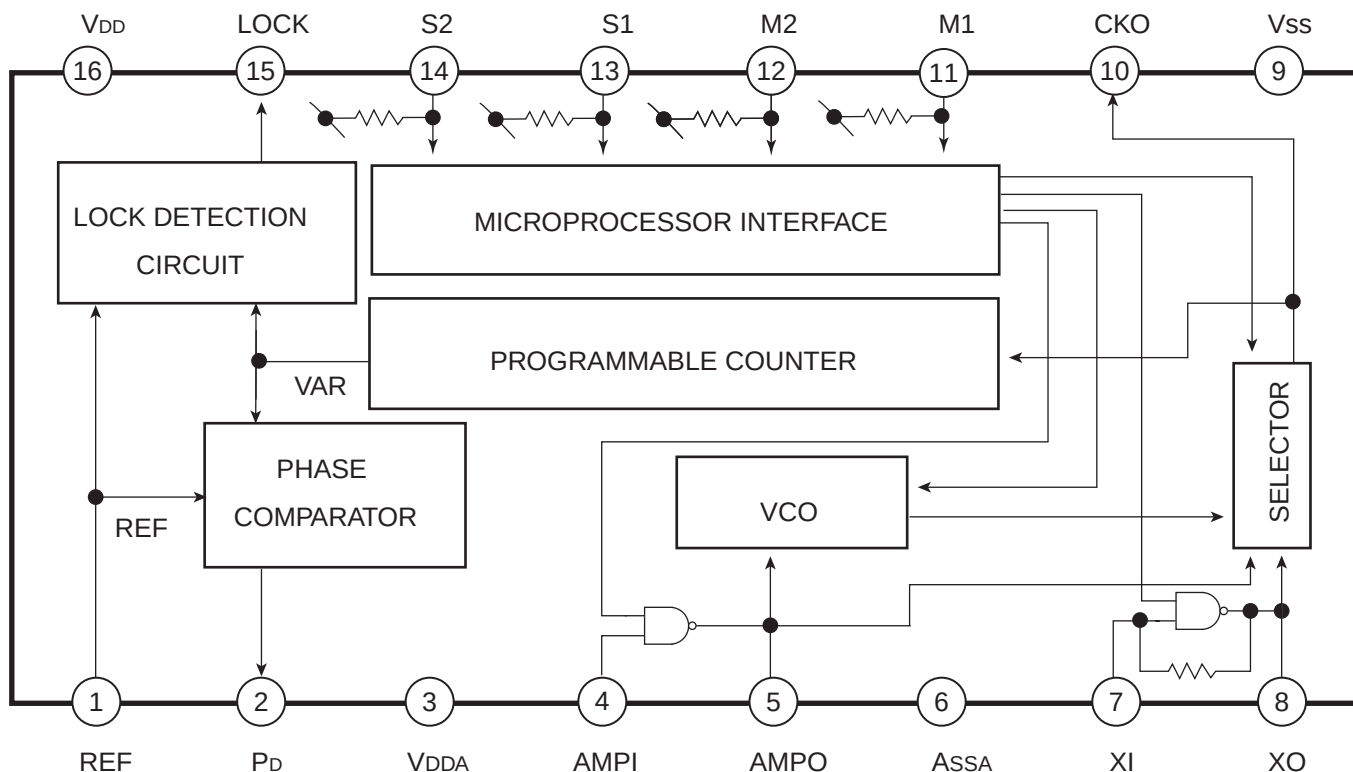
TC9164BFG(Function Switch)



Pin No.	Symbol	Function
1	VSS	Negative power supply
14	GND	Ground
28	VDD	Positive power supply
2,3,4,5,7,8,10,11	S1~S8	Input/output terminals
27,26,25,24,22,21,18,17	S1~S8	Input/output terminals
6,9,12	COM1 ~ COM3	Common terminals
23,20,17	COM1 ~ COM3	Common terminals
13	ST	Strobe input terminal for data reading
15	CK	Clock input terminal for data transfer
16	DATA	Data input terminal for switch

IC BLOCK DIAGRAMS AND DESCRIPTIONS

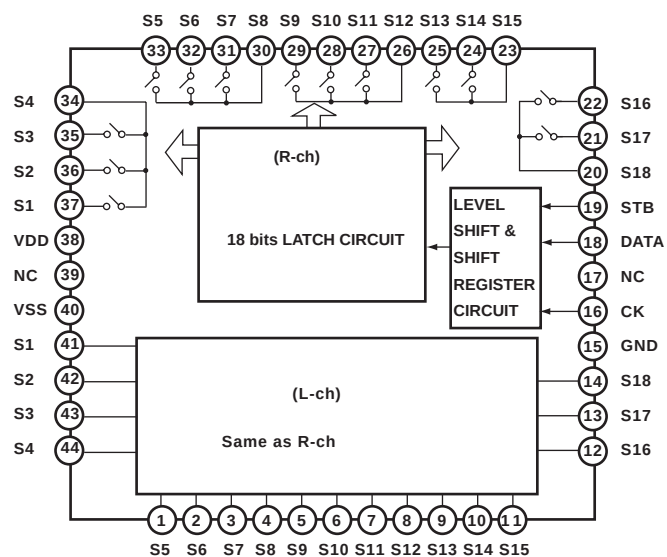
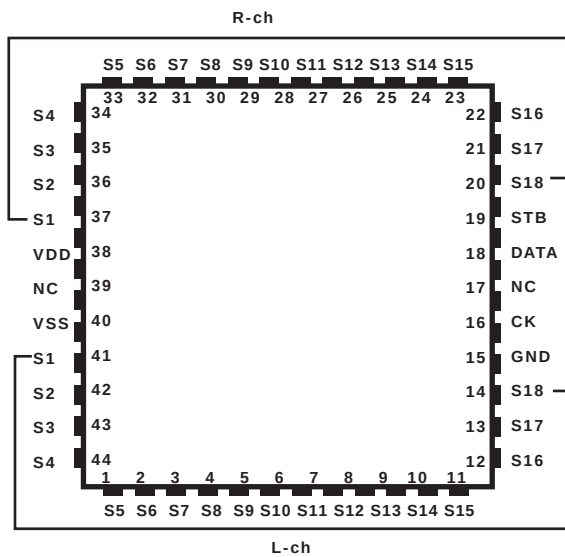
TC9246F(PLL IC for Digital Audio)



No.	Symbol	I/O	Function Description
1	REF	I	Reference signal input pin
2	PD	O	Phase error signal output pin
3	VDDA	-	Analog power supply
4	AMPI	I	Amplifier input pin for LPF or Oscillator 1
5	AMPO	O	Amplifier output pin for LPF or oscillator 1
6	VSSA	-	Analog ground pin
7	XI	I	Amplifier input pin for oscillator 3
8	XO	O	Output pin for oscillator 3
9	VSS	-	Digital ground pin
10	CKO	O	Oscillator clock output
11	M1	I	Mode select pin
12	M2	I	Mode select pin
13	S1	I	Parallel mode: Divided ratio select pin Serial mode: Data input pin from microprocessor
14	S2	I	Parallel mode: Divided ratio select pin Serial mode: Shift clock input pin
15	LOCK	O	Lock detect signal output pin
16	VDD	-	Digital power supply

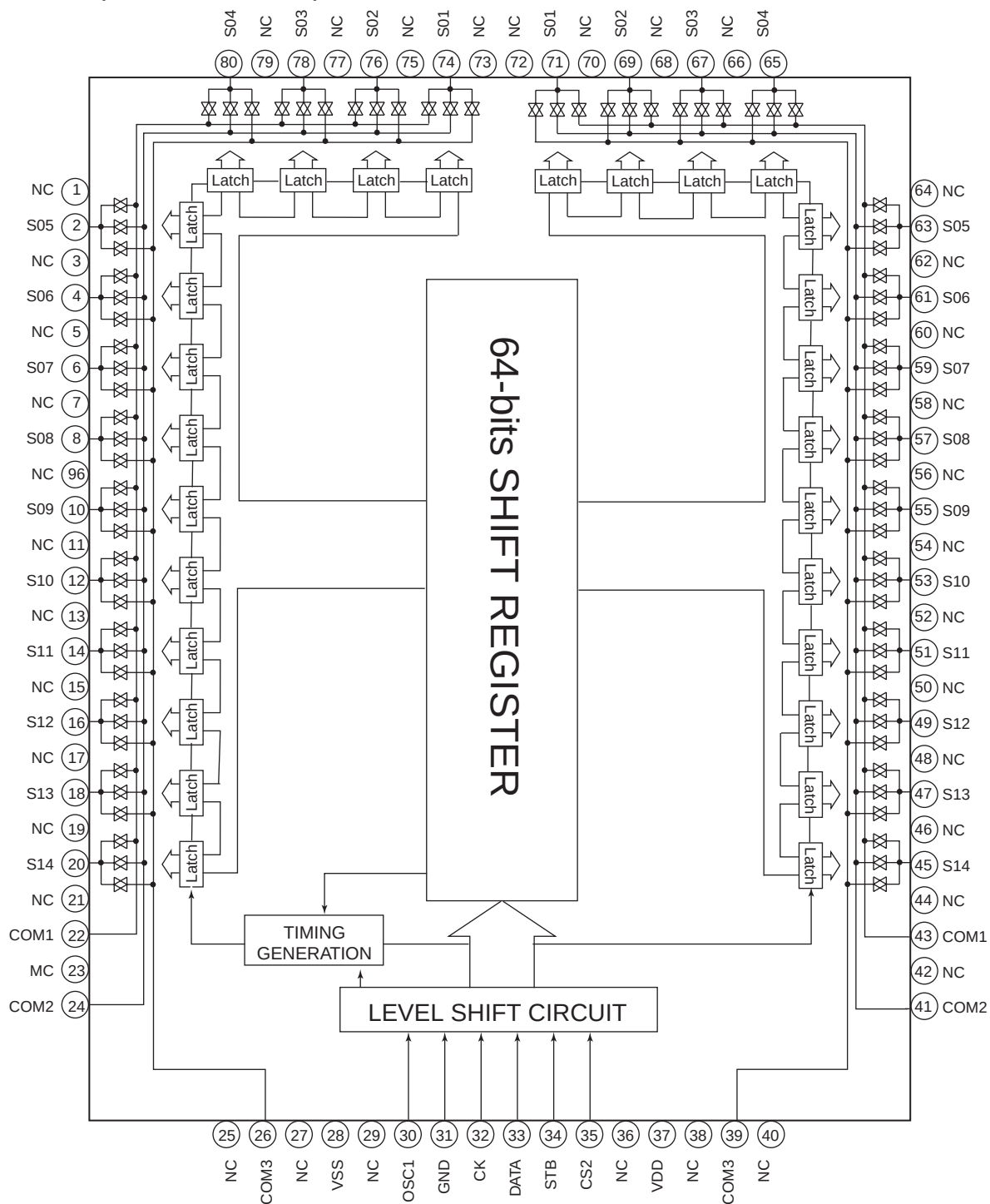
IC BLOCK DIAGRAM AND DESCRIPTION

TC9274FG-023 (Analog switch)



IC BLOCK DIAGRAM AND DESCRIPTION

TC94A46FG(Function Switch)



IC BLOCK DIAGRAM AND DESCRIPTION

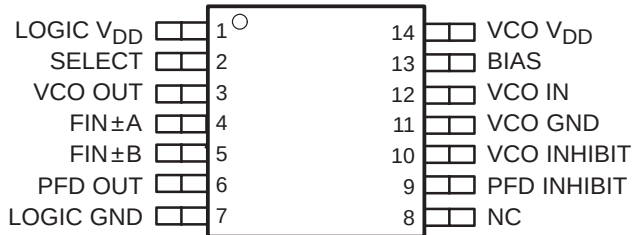
TC94A46FG(Function Switch)

PIN NO.	SYMBOL	TERMINAL	FUNCTION/OPERATION																																																
74	S01	Input/ Output Terminals	Analog Switch Circuit																																																
71																																																			
75	S02																																																		
69																																																			
78	S03																																																		
67																																																			
80	S04																																																		
65																																																			
2	S05																																																		
63																																																			
4	S06																																																		
61																																																			
6	S07																																																		
59																																																			
8	S08																																																		
57																																																			
10	S09																																																		
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12	S10																																																		
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14	S11																																																		
51																																																			
16	S12																																																		
49																																																			
18	S13																																																		
47																																																			
20	S14																																																		
45																																																			
22	Output/ Input Terminals																																																		
43			COM1																																																
24			COM2																																																
41			COM3																																																
26																																																			
39																																																			
28	Vss	Negative power	Power supply terminal.																																																
31	VDD	Positive power																																																	
37	GND	Digital ground																																																	
30	CS1	Chip select cord change-over terminal	Input to change a chip select code. <table><tr><th colspan="2">Terminal</th><th colspan="6">Chip select code</th></tr><tr><th>CS1</th><th>CS2</th><th>CS1</th><th>CS2</th><th>C1</th><th>C2</th><th>C3</th><th>C4</th></tr><tr><td>L</td><td>L</td><td>0</td><td>0</td><td>1</td><td>0</td><td>1</td><td>0</td></tr><tr><td>H</td><td>L</td><td>1</td><td>0</td><td>1</td><td>0</td><td>1</td><td>0</td></tr><tr><td>L</td><td>H</td><td>0</td><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td></tr><tr><td>H</td><td>H</td><td>1</td><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td></tr></table>	Terminal		Chip select code						CS1	CS2	CS1	CS2	C1	C2	C3	C4	L	L	0	0	1	0	1	0	H	L	1	0	1	0	1	0	L	H	0	1	1	0	1	0	H	H	1	1	1	0	1	0
Terminal			Chip select code																																																
CS1	CS2		CS1	CS2	C1	C2	C3	C4																																											
L	L		0	0	1	0	1	0																																											
H	L		1	0	1	0	1	0																																											
L	H		0	1	1	0	1	0																																											
H	H	1	1	1	0	1	0																																												
35	CS2																																																		
32	CK	Clock input	Clock input to transfer a data.																																																
33	DATA	Data input	Analog switch control data input.																																																
34	STB	Strobe input	Strobe input to write a data.																																																
1,3, 5,7, 9,11, 13,15, 17,19, 21,23, 25,27, 29,36, 38,40, 42,44, 46,48, 50,52, 54,56, 58,60, 62,64 66,68, 70,72, 73	NC	No connection																																																	

IC BLOCK DIAGRAM AND DESCRIPTION

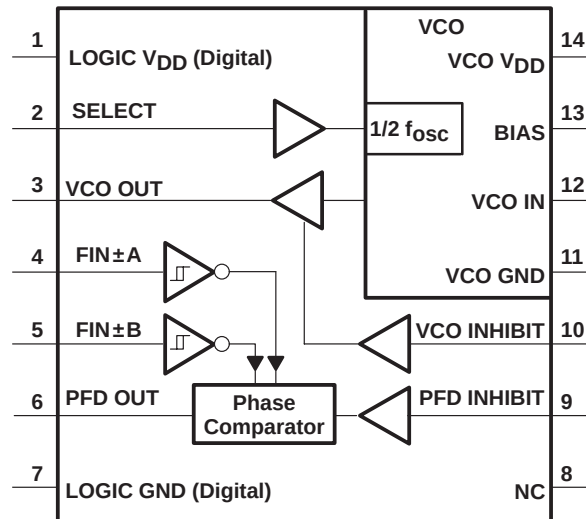
TLC2932IPWLE(High-Performance Phase-Locked Loop)

PW PACKAGE
(TOP VIEW)



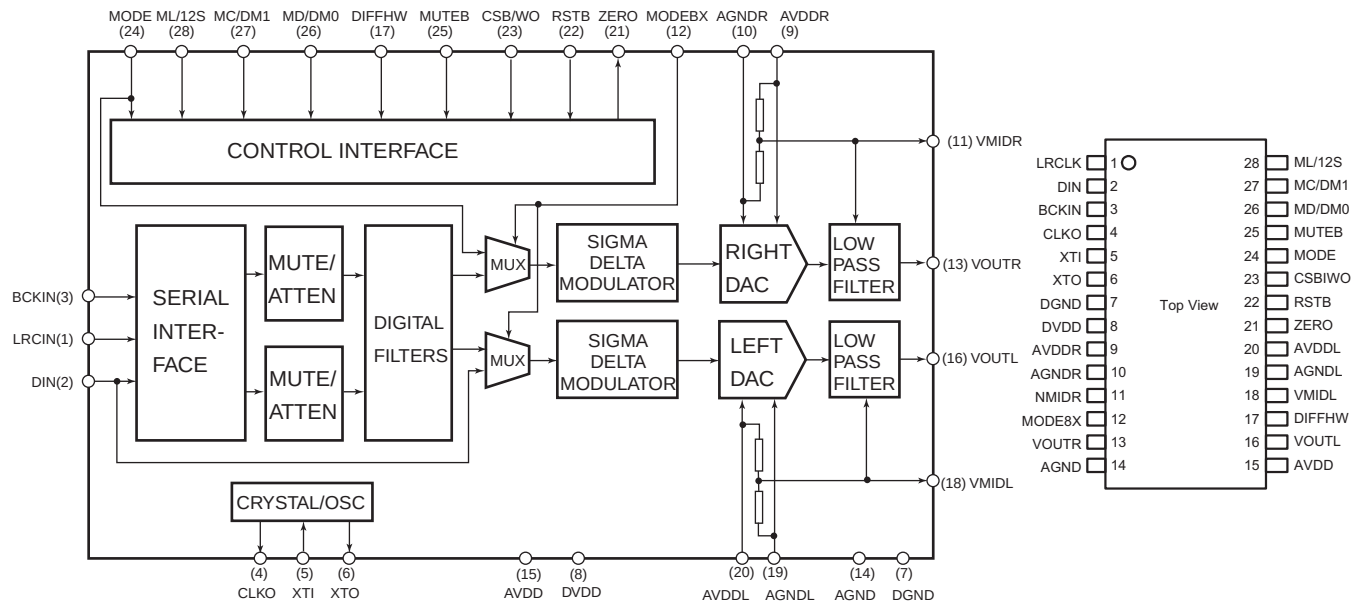
Terminal Functions

TERMINAL NAME	NO.	I/O	DESCRIPTION
FIN±A	4	I	Input reference frequency $f_{(REF IN)}$ is applied to FIN±A.
FIN±B	5	I	Input for VCO external counter output frequency $f_{(FIN±B)}$. FIN±B is nominally provided from the external counter.
LOGIC GND	7		GND for the internal logic.
LOGIC V _{DD}	1		Power supply for the internal logic. This power supply should be separate from VCO V _{DD} to reduce cross-coupling between supplies.
NC	8		No internal connection.
PFD INHIBIT	9	I	PFD inhibit control. When PFD INHIBIT is high, PFD output is in the high-impedance state, see Table 3.
PFD OUT	6	O	PFD output. When the PFD INHIBIT is high, PFD output is in the high-impedance state.
BIAS	13	I	Bias supply. An external resistor (R_{BIAS}) between VCO V _{DD} and BIAS supplies bias for adjusting the oscillation frequency range.
SELECT	2	I	VCO output frequency select. When SELECT is high, the VCO output frequency is $y/2$ and when low, the output frequency is $y/1$, see Table 1.
VCO IN	12	I	VCO control voltage input. Nominally the external loop filter output connects to VCO IN to control VCO oscillation frequency.
VCO INHIBIT	10	I	VCO inhibit control. When VCO INHIBIT is high, VCO OUT is low (see Table 2).
VCO GND	11		GND for VCO.
VCO OUT	3	O	VCO output. When the VCO INHIBIT is high, VCO output is low.
VCO V _{DD}	14		Power supply for VCO. This power supply should be separated from LOGIC V _{DD} to reduce cross-coupling between supplies.



IC BLOCK DIAGRAM AND DESCRIPTION

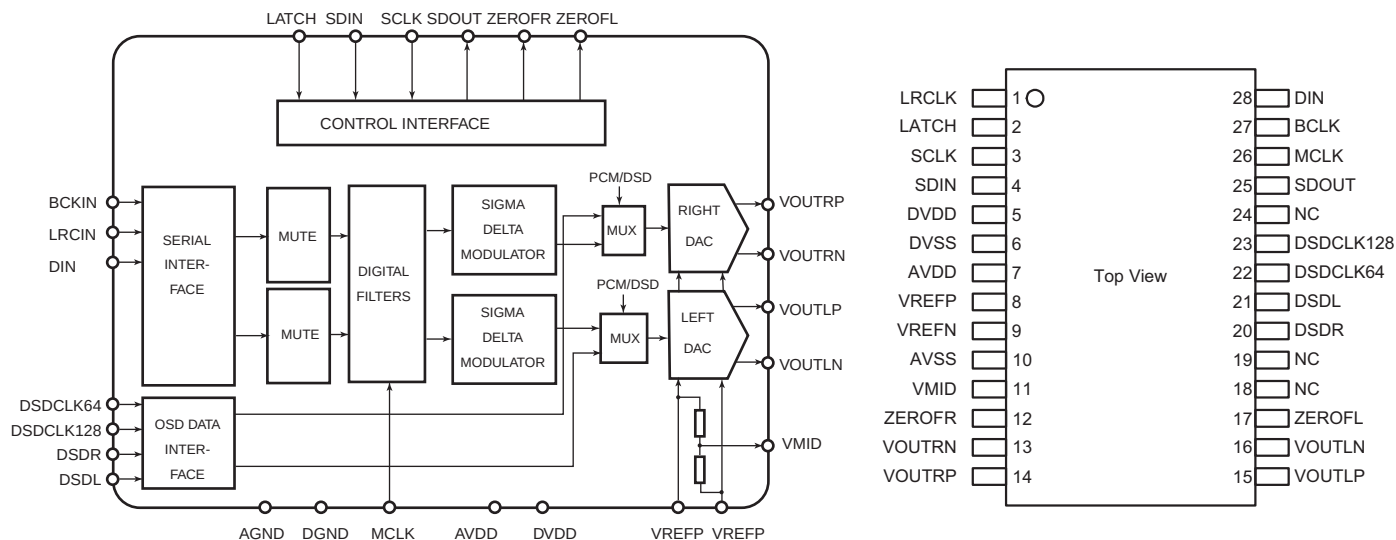
WM8716(24 bit 192kHz Stereo DAC)



PIN	NAME	TYPE	DESCRIPTION
1	LRCIN	Digital input	Sampling rate clock input
2	DIN	Digital input	Audio data serial input
3	BCKIN	Digital input	Audio data bit clock input
4	CLKO	Digital output	Oscillator buffered output
5	XTI	Analog input	Oscillator input
6	XTO	Analog ioutput	Oscillator output
7	DGND	Supply	Digital ground supply
8	DVDD	Supply	Digital positive supply
9	AVDDR	Supply	Analog positive supply
10	AGNDR	Supply	Analog ground supply
11	VMIDR	Analog ioutput	Mid rail right channel
12	MODE8X	Digital input	Internal pull-down, active high, 8xfs mode
13	VOUTr	Analog ioutput	Right channel DAC output
14	AGNDR	Supply	Analog ground supply
15	AVDDR	Supply	Analog positive supply
16	VOUTr	Analog ioutput	Left channel DAC output
17	DIFFHW	Digital input	Internal pull-down, active high, differential mono mode
18	VMIDL	Analog ioutput	Mid rail left channel
19	AGNDL	Supply	Analog ground supply
20	AVDDL	Supply	Analog positive supply
21	ZERO	Digital output	Infinite zero detect-active low. Open drain type output with active pull-down.
22	RSTB	Digital input	Rest input-active low. Internal pull-up.
23	CSBIWO	Digital input	Low for serial interface operation.
24	MODE8X	Digital input	High for software mode
25	MUTEB	Digital input	Low to soft mute. High for normal operation. Z for automute.
26	MD/DM0	Digital input	Control serial interface data signal.
27	MC/DM1	Digital input	Control serial interface clock signal.
28	ML/12S	Digital input	Control signal interface load signal.

IC BLOCK DIAGRAM AND DESCRIPTION

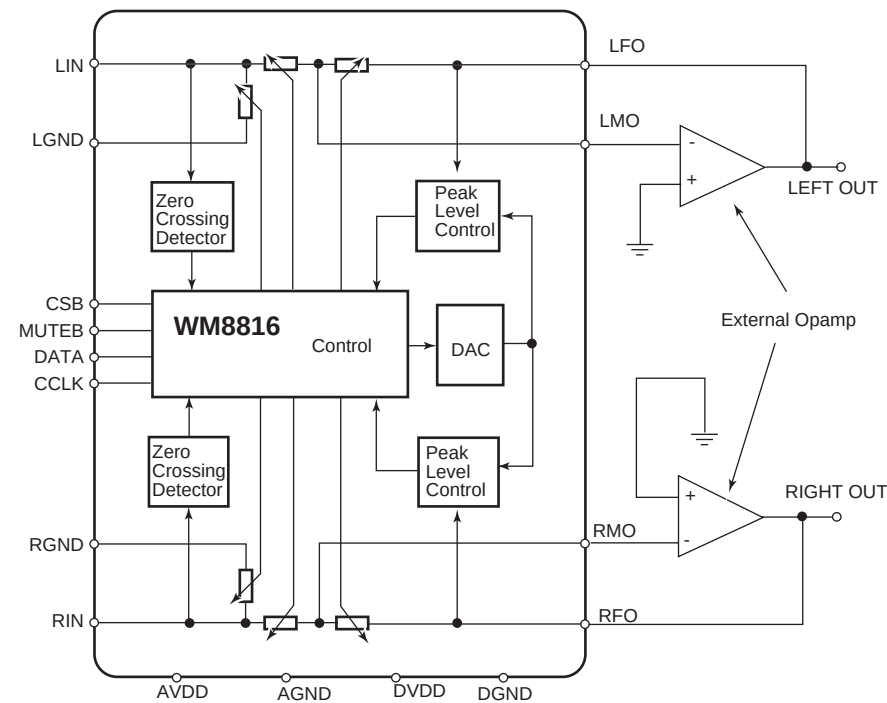
WM8719(24 bit differential stereo DAC with volume control)



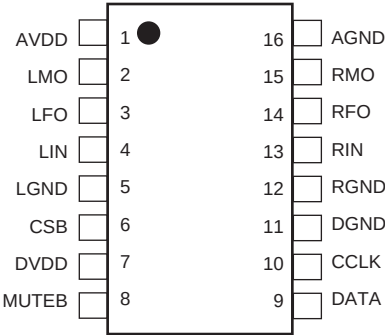
PIN	NAME	TYPE	DESCRIPTION
1	LRCIN	Digital input	PCM DAC sample clock input
2	LATCH	Digital input	Serial control load input
3	SCLK	Digital input	Serial control data input clock
4	SDIN	Digital	Serial control data input clock
5	DVDD	Supply	Digital positive supply
6	DGND	Supply	Digital ground supply
7	AVDD	Supply	Analog ground supply
8	VREFP	Supply	DAC positive reference
9	VREFN	Supply	DAC negative reference
10	AGND	Supply	Analog ground supply DAC positive reference
11	VMID	Analog output	Mid rail decoupling point
12	ZEROFR	Digital output	Infinite ZERO detect flag for right channel
13	VOUTRN	Analog output	Right channel DAC output positive
14	VOUTRP	Analog output	Right channel DAC output negative
15	VOUTLP	Analog output	Left channel DAC output positive
16	VOUTLN	Analog output	Left channel DAC output negative
17	ZEROFL	Digital output	Infinite ZERO detect flag for left channel
18	NC		
19	NC		
20	DSDR	Digital input	Right channel DSD bitstream input
21	DSDL	Digital input	Left channel DSD bitstream input
22	DSDCLK64	Digital bi-directional	DSD format clock at 64fs
23	DSDCLK128	Digital bi-directional	DSD format clock at 128fs.(Optional for OSD bi-phase mode)
24	NC		
25	SDOUT	Digital output	Serial control data output
26	MCLK	Digital input	Master clock input
27	BCLKIN	Digital input	PCM audio data bit clock input
28	DIN	Digital input	PCM serial audio data input

WM8816(Stereo Digital Volume Control)

BLOCK DIAGRAM



PIN CONFIGURATION



PIN DESCRIPTION

PIN	NAME	TYPE	DESCRIPTION
1	AVDD	Supply	Supply voltage for Analogue Circuitry
2	LMO	Analogue output	External Op-amp Inverting Input (Left channel)
3	LFO	Analogue input	External Op-amp Feedback Signal (Left channel)
4	LIN	Analogue input	Input Signal (Left Channel)
5	LGND	Analogue input	Input Signal Ground (Left Channel)
6	CSB	Digital input	Chip Select (active low)
7	DVDD	Supply	Supply Voltage for Digital Circuitry
8	MUTE B	Digital input	Mute (active low)
9	DATA	Digital In/Out	Serial Interface Data Input/Output (tri-state)
10	CCLK	Digital input	Serial Interface Clock
11	DGND	Supply	Digital Ground
12	RGND	Analogue input	Input Signal Ground (Left Channel)
13	RIN	Analogue input	Input Signal (Left Channel)
14	RFO	Analogue input	External Op-amp Feedback Signal (Left channel)
15	RMO	Analogue output	External Op-amp Inverting Input (Left channel)
16	AGND	Supply	Analogue Ground

Sch. No.	REF.	PCB No.	Slot	Description
				B to B:Board to Board PCB
1	U03	8144	F	PHONO/AF IN/OUT 1 to 3
1	U033	8146		B to B
2	U032	8145	G	AF IN 4-9 OUT 4/5
3	U04	8148	E	MULTI IN 1/2
4	U02	8139		Preamp.
5	U02	8139		Preamp.
6	U11	8166		Mother(Main micro chip)
7	U09	8162	C	DIR
8	U09	8162	C	DIR
9	U26	8163		DSP Main
10	U26	8163		DSP Zone
11	U15	8181		+B select
11	U152	8182		Rectifier 1
11	U154	8184		Sp terminal
11	U162	8187		Rectifier 2
12	U153	8183		Power transformer
12	U156	8200		AC outlet (K only)
12	U16	8186		Primary
12	U163	8188		Elect. capacitor
12	U164	8189		Power switch
13	U023	8141	D	COAXIAL IN/OUT
13	U024	8142		B to B
13	U06	8152	K	TUNER
14	U23	8218		Display and Sub-micro chip
14	U232	8219		Standby ind./sw
14	U233	8220		Operation switches
14	U234	8221		Headphones
14	U235	8222		Front opto. input
14	U236	8223		Front video input
15	U24	8228	B	NET-TUNE
16	U10	8164	A	IEEE1394
17	U01	8137	L	HDMI
18	U18	8201	H	S VIDEO
19	U182	8202	I	COMPONENT VIDEO IN/OUT/S VIDEO
19	U183	8203		VIDEO BUFFER
20	U027	8205	J	COMPONENT VIDEO IN/OUT
21	U20	8207	J	COMPONENT VIDEO IN/OUT
21	U21	8209	K	D VIDEO (j MODEL ONLY)
22	U12	8168		Driver section
23	U122	8169		Power ampliifer L
23	U123	8170		Thermo. det.
23	U132	8174		Power ampliifer SL/SBL
23	U14	8177		B to B
23	U142	8178		B to B
24	U123	8170		Thermo. det.
24	U13	8173		Power amplifier R/C
24	U133	8175		Power amplifier SR/SBR
24	U25	8177		B to B
24	U252	8178		B to B

PRINTED CIRCUIT BOARD-PARTS LIST

NOTE: THE COMPONENTS IDENTIFIED BY MARK !
ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PART NUMBER SPECIFIED.

CAUTION: Replacement for transistor of mark *, if necessary
must be made from the same beta group (hFE) as
the original type.

NOTE: <D>:120V model only <GT>:Asian model for 220V

<DT>:Asian model only for 120V

<R>:Chinese model only <K>:Korean model only

NP:No spare parts

SLOT H PC BOARD(NAVD-8201-1A/1B)

SLOT I PC BOARD(NAVD-8202-1A/1B)

CONNECTOR PC BOARD(NAETC-8203-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q2001	22242104R2	TC7WBD125AFK
Q2002	22274541GR2TO or 22274541GR2PH	TC74VHCT541AFT or 74AHCT541PW
Q2004,Q2011	22241884R2	LC74761M-9848
Q2005,Q2012,Q2029	22242090R2	BU2152FS
Q2008,Q2009,Q2019	22241443R2	TK15420M
Q2013,Q2046	22242137R2	TC7W53FK
Q2014,Q2015,Q2016	22242109R2	MM1117XFBE
Q2017,Q2030,Q2031	2227B0525R2	TC74HC4052AFT
Q2026,Q2027,Q2028	2227B0515R2	TC74HC4051AFT
Q2032,Q2033,Q2034	2227B0515R2	TC74HC4051AFT
Q2035,Q2036	2227B0525R2	TC74HC4052AFT
Q2037,Q2038,Q2039	2227B0515R2	TC74HC4051AFT
Q2040,Q2041	22241443R2	TK15420M
Q2042,Q2043,Q2050	22241443R2	TK15420M
Q2201	22241858R2	MM1093NF
Q2202	22241998R2	MM1093PF <GT/DT/R/K>
Q2203,Q2208	22241443R2	TK15420M
Q2204	22242109R2	MM1117XFBE
Q2206	22241850R2	TC90A69F
Q2207	22241999	TA8772AN <GT/DT/R/K>
Q2213,Q2215	2227B0525R2	TC74HC4052AFT
Q2216	22241851R3	TA1270BF
Q2217	22241440R2	MAX4018ESD
Q2228	22241442R2	MAX4218ESD
Q2230,Q2232,Q2233	22241443R2	TK15420M
Q2235	22241465R2	LA7106MFP
	Transistors	
Q2007,Q2018,Q2020	2213145R2	2SC2712-GR
Q2021,Q2023,Q2025	2214490R2 or 2216210R2	RN1404 or KRC104S
Q2022,Q2024	2213145R2	2SC2712-GR
Q2047,Q2048,Q2049	2214375R2	2SA1162-GR
Q2205,Q2209,Q2210	2213145R2	2SC2712-GR
Q2211,Q2212	2213145R2	2SC2712-GR <GT/DT/R/K>
Q2214	2214460R2 or 2216330R2	RN1401 or KRC101S <GT/DT/R/K>
Q2218,Q2220,Q2221	2214530R2 or 2216220R2	RN2402 or KRA102S
Q2219,Q2222,Q2223	2216031R2	RN1444-A
Q2224,Q2226,Q2229	2214460R2 or 2216210R2	RN1401 or KRC104S
Q2231	2214490R2 or	RN1404 or
Q2225	2213145R2	2SC2712-GR
Q2227	2214460R2 or	RN1401 or <GT/DT/R/K>
Q2234	2216210R2	KRC104S <GT/DT/R/K>
Q2236	2214375R2	2SA1162-GR
	Diodes	
D2001,D2002,D2003	223234R2 or	1SS352 or
D2004,D2005,D2006	223269R2	1SS355,Chip
D2007,D2008,D2201	223234R2 or	1SS352 or
D2202,D2203,D2204	223269R2	1SS355,Chip
D2205,D2206,D2207	223234R2 or	1SS352 or
D2208,D2210,D2212	223269R2	1SS355,Chip
	Coils	
L2001,L2003	231292J056R2	NCH-1572,Choke
L2002,L2004	231237M022R2	NCH-1471,Choke
L2201	231237K330R2	NCH-1478,Choke
L2202	231237K220R2	NCH-1477,Choke <GT/DT/R/K>
L2203,L2206,L2208	231237K220R2	NCH-1477,Choke
L2204,L2205,L2207	231237K101R2	NCH-1481,Choke
L2209,L2210,L2211	231237K220R2	NCH-1477,Choke
L2212,L2213	231237K470R2	NCH-1479,Choke

CIRCUIT NO.	PART NO.	DESCRIPTION
	Oscillators	
X2001,X2003	3010363	HC-49/U0314.318M
X2002,X2004	3010364	HC-49/U0317.734M <GT/DT/R/K>
X2201,X2203	3010369	HC-49/U033.579545M
X2202,X2205	3010381	HC-49/U034.433619M <GT/DT/R/K>
X2204	3010370	CSBLA503KECF30,Ceramic
	Capacitors	
C2001,C2013,C2014	332161040R1	CK725F1E-104Z1,Chip ceramic
C2002,C2041	342101002R1	CC725CH1H-100D1,Chip ceramic
C2003,C2042	342101804R1	CC725CH1H-180J1,Chip ceramic
C2004,C2043	342103304R1	CC725CH1H-330J1,Chip ceramic <GT/DT/R/K>
C2005,C2044,C2223	342100802R1	CC725CH1H-080D1,Chip ceramic <GT/DT/R/K>
C2007,C2026	394680107 or	CE04W50V-1M(VR) or
C2048,C2074	394780107	CE04W50V-1M(SC),Elect.
C2008,C2025,C2049	342104704R1	CC725CH1H-470J1,Chip ceramic
C2015,C2029,C2030	394621017 or	CE04W6.3V-100M(VR) or
C2031,C2053,C2054	394721017	CE04W6.3V-100M(SC),Elect.
C2016,C2038,C2039	342108204R1	CC725CH1H-820J1,Chip ceramic
C2017,C2028,C2032	332161040R1	CK725F1E-104Z1,Chip ceramic
C2018,C2057,C2058	394641007 or	CE04W16V-10M(VR) or
C2059,C2060,C2061	394741007	CE04W16V-10M(SC),Elect.
C2019,C2067	394683397	CE04W50V-0.33M(VR),Elect.
C2020,C2068	374726824	ECQ-B50V-682J,Plastic film
C2021,C2069	342102704R1	CC725CH1H-270J1,Chip ceramic
C2022,C2070,C2229	342102204R1	CC725CH1H-220J1,Chip ceramic
C2023,C2071	332101225R1	CK725B1H-122K1,Chip ceramic
C2024,C2073,C2297	374722234	ECQ-B50V-223J,Plastic film
C2027,C2076,C2201	394684797 or	CE04W50V-0.47M(VR) or
	394784797	CE04W50V0.47M(SC),Elect.
C2033,C2092	375524744	MMT50V-474J,Plastic film
C2034,C2035,C2036	332161040R1	CK725F1E-104Z1,Chip ceramic
C2037,C2045,C2046	332161040R1	CK725F1E-104Z1,Chip ceramic
C2040	394661017	CE04W35V-100M(VR),Elect.
C2056,C2065,C2075	332161040R1	CK725F1E-104Z1,Chip ceramic
C2062,C2063,C2064	394621017 or	CE04W6.3V-100M(VR) or
C2079,C2080,C2085	394721017	CE04W6.3V-100M(SC),Elect.
C2066,C2180,C2184	394641007 or	CE04W16V-10M(VR) or
	394741007	CE04W16V-10M(SC),Elect.
C2072	342104704R1	CC725CH1H-470J1,Chip ceramic
C2077,C2078,C2082	332161040R1	CK725F1E-104Z1,Chip ceramic
C2081,C2086,C2089	394644707 or	CE04W16V-47M(VR) or
	394744707	CE04W16V-47M(SC),Elect.
C2083,C2142,C2143	394622217 or	CE04W6.3V-220M(VR) or
	394722217	CE04W6.3V-220M(SC),Elect.
C2084,C2084,C2087	332161040R1	CK725F1E-104Z1,Chip ceramic
C2088,C2090,C2091	332161040R1	CK725F1E-104Z1,Chip ceramic
C2093,C2094,C2095	332161040R1	CK725F1E-104Z1,Chip ceramic
C2096,C2097,C2098	332161040R1	CK725F1E-104Z1,Chip ceramic
C2099,C2100,C2101	332161040R1	CK725F1E-104Z1,Chip ceramic
C2102,C2103,C2104	332161040R1	CK725F1E-104Z1,Chip ceramic
C2105,C2106,C2107	332161040R1	CK725F1E-104Z1,Chip ceramic
C2108,C2109,C2110	332161040R1	CK725F1E-104Z1,Chip ceramic
C2111,C2112,C2113	332161040R1	CK725F1E-104Z1,Chip ceramic
C2114,C2115,C2116	332161040R1	CK725F1E-104Z1,Chip ceramic
C2117,C2118,C2119	332161040R1	CK725F1E-104Z1,Chip ceramic
C2120,C2121,C2122	332161040R1	CK725F1E-104Z1,Chip ceramic
C2123,C2124,C2125	332161040R1	CK725F1E-104Z1,Chip ceramic
C2126,C2128,C2129	332161040R1	CK725F1E-104Z1,Chip ceramic
C2127,C2137,C2138	394621017 or	CE04W6.3V-100M(VR) or
	394721017	CE04W6.3V-100M(SC),Elect.
C2130 ,C2131,C2132	332161040R1	CK725F1E-104Z1,Chip ceramic
C2133,C2134,C2135	332161040R1	CK725F1E-104Z1,Chip ceramic
C2136,C2139,C2140	332161040R1	CK725F1E-104Z1,Chip ceramic
C2141,C2147,C2148	332161040R1	CK725F1E-104Z1,Chip ceramic
C2144,C2145,C2152	394622217 or	CE04W6.3V-220M(VR) or
C2153,C2155,C2156	394722217	CE04W6.3V-220M(SC),Elect.
C2149,C2150,C2151	332161040R1	CK725F1E-104Z1,Chip ceramic
C2154,C2157,C2160	332161040R1	CK725F1E-104Z1,Chip ceramic
C2158,C2159,C2161	394622217 or	CE04W6.3V-220M(VR) or
C2162,C2164,C2165	394722217	CE04W6.3V-220M(SC),Elect.
C2163,C2166,C2176	332161040R1	CK725F1E-104Z1,Chip ceramic
C2167,C2168,C2181	394622217 or	CE04W6.3V-220M(VR) or
C2169,C2170,C2171	332153330R1	CK725F1H-333Z1,Chip ceramic
C2177,C2182,C2209	332161040R1	CK725F1E-104Z1,Chip ceramic
C2181,C2183,C2268	394722217	CE04W6.3V-220M(SC),Elect.
C2202,C2250,C2251	394784797 or	CE04W50V0.47M(SC) or
	394684797	CE04W50V-0.47M(VR),Elect. <GT/DT/R/K>
C2203	342103914R1	CC725CH1H-391J1,Chip ceramic

C2204	342103914R1	CC725CH1H-391J1,Chip ceramic <GT/DT/R/K>
C2205	342115614R1	CC725CH1E-561J1,Chip ceramic
C2206	342115614R1	CC725CH1E-561J1,Chip ceramic <GT/DT/R/K>
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C2207,C2237,C2238	394621017	CE04W6.3V-100M(VR),Elect.
C2208	394721017 or	CE04W6.3V-100M(SC) or
C2208	394621017	CE04W6.3V-100M(VR),Elect. <GT/DT/R/K>
C2210,C2249,C2253	332161040R1	CK725F1E-104Z1,Chip ceramic <GT/DT/R/K>
C2211,C2291,C2301	394680227 or	CE04W50V-2.2M(VR) or
	394780227	CE04W50V-2.2M(SC),Elect.
C2212,C2214,C2217	332151030R1	CK725F1H-103Z1,Chip ceramic
C2213	394680227 or	CE04W50V-2.2M(VR) or
	394780227	CE04W50V-2.2M(SC),Elect. <GT/DT/R/K>
C2215	394680477 or	CE04W50V-4.7M(VR) or
	394780477	CE04W50V-4.7M(SC),Elect.
C2216	394680477 or	CE04W50V-4.7M(VR) or
	394780477	CE04W50V-4.7M(SC),Elect. <GT/DT/R/K>
C2218	332151030R1	CK725F1H-103Z1,Chip ceramic
C2219,C2294	342105604R1	CC725CH1H-560J1,Chip ceramic
C2220,C2320	342105604R1	CC725CH1H-560J1,Chip ceramic <GT/DT/R/K>
C2221	342100802R1	CC725CH1H-080D1,Chip ceramic
C2222	342106804R1	CC725CH1H-680J1,Chip ceramic
C2224	342106804R1	CC725CH1H-680J1,Chip ceramic <GT/DT/R/K>
C2230,C2266,C2267	342101204R1	CC725CH1H-120J1,Chip ceramic
C2231,C2232,C2233	332151030R1	CK725F1H-103Z1,Chip ceramic
C2234,C2244,C2245	332151030R1	CK725F1H-103Z1,Chip ceramic
C2235,C2236,C2296	394644707 or	CE04W16V-47M(VR) or
	394744707	CE04W16V-47M(SC),Elect.
C2237,C2238,C2263	394721017	CE04W6.3V-100M(SC),Elect.
C2239,C2240	394644707 or	CE04W16V-47M(VR) or
	394744707	CE04W16V-47M(SC),Elect.<GT/DT/R/K>
C2241	394684797 or	CE04W50V-0.47M(VR) or
	394784797	CE04W50V0.47M(SC),Elect.
C2242,C2243,C2257	332161040R1	CK725F1E-104Z1,Chip ceramic
C2246,C2247,C2252	332151030R1	CK725F1H-103Z1,Chip ceramic <GT/DT/R/K>
C2248	394641007 or	CE04W16V-10M(VR) or
	394741007	CE04W16V-10M(SC),Elect. <GT/DT/R/K>
C2254,C2255,C2256	332161040R1	CK725F1E-104Z1,Chip ceramic <GT/DT/R/K>
C2258,C2259,C2260	332151030R1	CK725F1H-103Z1,Chip ceramic
C2261	374726814	ECQ-B50V-681J,Plastic film
C2262,C2290,C2293	374721044	ECQ-V50V-104J,Plastic film
C2263 ,C2284,C2313	394621017	CE04W6.3V-100M(VR),Elect.
C2264,C2265	342102204R1	CC725CH1H-220J1,Chip ceramic
C2269,C2270,C2275	394680107 or	CE04W50V-1M(VR) or
	394780107	CE04W50V-1M(SC),Elect. <GT/DT/R/K>
C2271,C2277,C2278	332161040R1	CK725F1E-104Z1,Chip ceramic
C2272	332151030R1	CK725F1H-103Z1,Chip ceramic <GT/DT/R/K>
C2273,C2274,C2276	332161040R1	CK725F1E-104Z1,Chip ceramic <GT/DT/R/K>
C2279	332161040R1	CK725F1E-104Z1,Chip ceramic <GT/DT/R/K>
C2280,C2281,C2285	332161040R1	CK725F1E-104Z1,Chip ceramic
C2284,C2313,C2316	394721017	CE04W6.3V-100M(SC),Elect.
C2286,C2288,C2308	394722217 or	CE04W6.3V-220M(SC) or
	394622217	CE04W6.3V-220M(VR),Elect.
C2287,C2289,C2292	332161040R1	CK725F1E-104Z1,Chip ceramic
C2295,C2298,C2302	332161040R1	CK725F1E-104Z1,Chip ceramic
C2299	374722224	ECQ-B50V-222J,Plastic film
C2300	394682297	CE04W50V-0.22M(VR),Elect.
C2303	332151030R1	CK725F1H-103Z1,Chip ceramic
C2304,C2305,C2310	332161040R1	CK725F1E-104Z1,Chip ceramic
C2306,C2307,C2318	394644707 or	CE04W16V-47M(VR) or
	394744707	CE04W16V-47M(SC),Elect.
C2309,C2334,C2335	394722217	CE04W6.3V-220M(SC),Elect.
C2311,C2312,C2314	332161040R1	CK725F1E-104Z1,Chip ceramic
C2315	332151030R1	CK725F1H-103Z1,Chip ceramic <GT/DT/R/K>
C2316,C2343,C2344	394621017	CE04W6.3V-100M(VR),Elect.
C2317,C2319,C2321	332161040R1	CK725F1E-104Z1,Chip ceramic
C2322,C2323,C2324	332161040R1	CK725F1E-104Z1,Chip ceramic
C2325,C2330,C2331	332153330R1	CK725F1H-333Z1,Chip ceramic
C2326,C2328,C2329	332161040R1	CK725F1E-104Z1,Chip ceramic
C2332,C2333,C2345	332161040R1	CK725F1E-104Z1,Chip ceramic
C2334,C2335,C2336	394622217 or	CE04W6.3V-220M(VR) or
	394722217	CE04W6.3V-220M(SC),Elect.
C2337,C2338,C2339	394622217 or	CE04W6.3V-220M(VR) or
C2340,C2341,C2342	394722217	CE04W6.3V-220M(SC),Elect.
	Resistors	
R2001,R2002,R2022	435033314R1	RN72K1J-331JE,Chip carbon
R2003	435031224R1	RN72K1J-122JE,Chip carbon <GT/DT/R/K>
R2003,R2436,R2437	435030004R1	RN72K1J-000JE,Chip carbon <D>
R2004,R2005,R2006	435034714R1	RN72K1J-471JE,Chip carbon

R2007,R2029,R2042	435032224R1	RN72K1J-222JE,Chip carbon
R2008,R2035,R2043	435031014R1	RN72K1J-101JE,Chip carbon
R2009,R2011,R2044	435031214R1	RN72K1J-121JE,Chip carbon
R2010,R2023,R2024	435031524R1	RN72K1J-152JE,Chip carbon
R2012,R2047	435038244R1	RN72K1J-824JE,Chip carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R2013,R2021,2048	435034734R1	RN72K1J-473JE,Chip carbon
R2014,R2020,R2038	435031024R1	RN72K1J-102JE,Chip carbon
R2015,R2017,R2031	435036824R1	RN72K1J-682JE,Chip carbon
R2016,R2051	435032724R1	RN72K1J-272JE,Chip carbon
R2018,R2053,R2265	435033324R1	RN72K1J-332JE,Chip carbon
R2019,R2054,R2150	435032214R1	RN72K1J-221JE,Chip carbon
R2025,R2026,R2045	435031524R1	RN72K1J-152JE,Chip carbon
R2027,R2028,R2071	435035634R1	RN72K1J-563JE,Chip carbon
R2030,R2033,R2034	435031824R1	RN72K1J-182JE,Chip carbon
R2032,R2301,R2309	435031834R1	RN72K1J-183JE,Chip carbon
R2036,R2093,R2117	435031034R1	RN72K1J-103JE,Chip carbon
R2037	435031824R1	RN72K1J-182JE,Chip carbon <GT/DT/R/K>
R2037,R2097,R2142	435038224R1	RN72K1J-822JE,Chip carbon
R2039,R2040,R2041	435034714R1	RN72K1J-471JE,Chip carbon
R2046,R2096,R2146	435031214R1	RN72K1J-121JE,Chip carbon
R2049,R2055,R2070	435031024R1	RN72K1J-102JE,Chip carbon
R2050,R2052,R2081	435036824R1	RN72K1J-682JE,Chip carbon
R2056	435034734R1	RN72K1J-473JE,Chip carbon
R2057,R2217,R2225	435033314R1	RN72K1J-331JE,Chip carbon
R2058,R2059,R2060	435036804R1	RN72K1J-680JE,Chip carbon
R2061,R2062,R2063	435033334R1	RN72K1J-333JE,Chip carbon
R2064,R2065,R2066	435033334R1	RN72K1J-333JE,Chip carbon
R2067,R2068,R2069	435032224R1	RN72K1J-222JE,Chip carbon
R2072,R2073,R2074	435031014R1	RN72K1J-101JE,Chip carbon
R2075,R2094,R2095	435031014R1	RN72K1J-101JE,Chip carbon
R2076,R2079,R2254	435031044R1	RN72K1J-104JE,Chip carbon
R2077,R2078,R2108	435035634R1	RN72K1J-563JE,Chip carbon
R2080,R2083,R2088	435031824R1	RN72K1J-182JE,Chip carbon
R2082,R2329	435036824R1	RN72K1J-682JE,Chip carbon
R2084,R2198,R2339	435031234R1	RN72K1J-123JE,Chip carbon
R2085,R2086,R2288	435032224R1	RN72K1J-222JE,Chip carbon
R2087,R2110,R2119	435031534R1	RN72K1J-153JE,Chip carbon
R2089,R2090,R2091	435031824R1	RN72K1J-182JE,Chip carbon
R2092,R2143	435036834R1	RN72K1J-683JE,Chip carbon
R2098,R2149,R2346	435031524R1	RN72K1J-152JE,Chip carbon
R2099,R2100,R2107	435031014R1	RN72K1J-101JE,Chip carbon
R2101,R2102,R2103	435037504R1	RN72K1J-750JE,Chip carbon
R2104,R2105,R2106	435037504R1	RN72K1J-750JE,Chip carbon
R2109,R2251,R2252	435035634R1	RN72K1J-563JE,Chip carbon
R2111,R2112,R2113	435037504R1	RN72K1J-750JE,Chip carbon
R2114,R2115,R2116	435037504R1	RN72K1J-750JE,Chip carbon
R2118,R2127,R2128	435031034R1	RN72K1J-103JE,Chip carbon
R2120,R2129,R2138	435031824R1	RN72K1J-182JE,Chip carbon
R2121,R2122,R2123	435037504R1	RN72K1J-750JE,Chip carbon
R2124,R2125,R2126	435037504R1	RN72K1J-750JE,Chip carbon
R2130,R2131,R2132	435037504R1	RN72K1J-750JE,Chip carbon
R2133,R2134,R2135	435037504R1	RN72K1J-750JE,Chip carbon
R2136,R2137,R2140	435031034R1	RN72K1J-103JE,Chip carbon
R2139,R2178,R2180	435031824R1	RN72K1J-182JE,Chip carbon
R2141,R2200,R2218	435031024R1	RN72K1J-102JE,Chip carbon
R2144,R2223,R2224	435031014R1	RN72K1J-101JE,Chip carbon
R2145,R2152,R2154	435031034R1	RN72K1J-103JE,Chip carbon
R2148	435031514R1	RN72K1J-151JE,Chip carbon
R2151,R2153,R2155	435032214R1	RN72K1J-221JE,Chip carbon
R2156,R2157,R2158	435032214R1	RN72K1J-221JE,Chip carbon
R2159,R2184,R2188	435032214R1	RN72K1J-221JE,Chip carbon
R2160,R2161,R2162	435031034R1	RN72K1J-103JE,Chip carbon
R2163,R2164,R2165	435031034R1	RN72K1J-103JE,Chip carbon
R2166,R2167,R2168	435031034R1	RN72K1J-103JE,Chip carbon
R2169,R2170,R2171	435031034R1	RN72K1J-103JE,Chip carbon
R2172,R2173,R2174	435031034R1	RN72K1J-103JE,Chip carbon
R2175,R2176,R2177	435031034R1	RN72K1J-103JE,Chip carbon
R2179,R2183,R2196	435031534R1	RN72K1J-153JE,Chip carbon
R2181,R2182,R2275	435031824R1	RN72K1J-182JE,Chip carbon
R2185,R2186,R2187	435031034R1	RN72K1J-103JE,Chip carbon
R2189,R2190,R2191	435031034R1	RN72K1J-103JE,Chip carbon
R2192,R2193,R2207	435031034R1	RN72K1J-103JE,Chip carbon
R2194,R2195,R2285	435034714R1	RN72K1J-471JE,Chip carbon
R2197,R2201,R2274	435031534R1	RN72K1J-153JE,Chip carbon
R2202	435031534R1	RN72K1J-153JE,Chip carbon <GT/DT/R/K>
R2203,R2209	435033914R1	RN72K1J-391JE,Chip carbon
R2204,R2210	435033914R1	RN72K1J-391JE,Chip carbon <GT/DT/R/K>
R2205	435031054R1	RN72K1J-105JE,Chip carbon

R2206	435031054R1	RN72K1J-105JE,Chip carbon <GT/DT/R/K>
R2208,R2214	435031034R1	RN72K1J-103JE,Chip carbon <GT/DT/R/K>
R2211,R2213	435031034R1	RN72K1J-103JE,Chip carbon
R2216,R2244,R2441	435035604R1	RN72K1J-560JE,Chip carbon
R2219,R2220,R2228	435038214R1	RN72K1J-821JE,Chip carbon
R2221,R2234,R2235	435031024R1	RN72K1J-102JE,Chip carbon <GT/DT/R/K>
R2222	435031132R1	RN72K1J-113FE,Chip carbon <GT/DT/R/K>
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R2226	435033314R1	RN72K1J-331JE,Chip carbon
R2227,R2239,R2240	435031014R1	RN72K1J-101JE,Chip carbon
R2229,R2230,R2231	435038214R1	RN72K1J-821JE,Chip carbon
R2232	435035624R1	RN72K1J-562JE,Chip carbon
R2233	435031224R1	RN72K1J-122JE,Chip carbon
R2236,R2253,R2255	435032214R1	RN72K1J-221JE,Chip carbon
R2237,R2238	435031024R1	RN72K1J-102JE,Chip carbon <GT/DT/R/K>
R2241,R2242	435031034R1	RN72K1J-103JE,Chip carbon <GT/DT/R/K>
R2243,R2245,R2246	435031014R1	RN72K1J-101JE,Chip carbon
R2247,R2249,R2250	435031014R1	RN72K1J-101JE,Chip carbon
R2248,R2256,R2257	435031034R1	RN72K1J-103JE,Chip carbon
R2258,R2260	435031814R1	RN72K1J-181JE,Chip carbon
R2259,R2286,R2305	435031034R1	RN72K1J-103JE,Chip carbon
R2261,R2262,R2269	435031014R1	RN72K1J-101JE,Chip carbon
R2263,R2264,R2298	435031044R1	RN72K1J-104JE,Chip carbon
R2266,R2267,R2272	435033334R1	RN72K1J-333JE,Chip carbon
R2268	435033344R1	RN72K1J-334JE,Chip carbon
R2270,R2283,R2295	435031014R1	RN72K1J-101JE,Chip carbon
R2271,R2273,R2297	435035634R1	RN72K1J-563JE,Chip carbon
R2276,R2278,R2279	435031824R1	RN72K1J-182JE,Chip carbon
R2277	435031534R1	RN72K1J-153JE,Chip carbon
R2280,R2360,R2366	435032214R1	RN72K1J-221JE,Chip carbon
R2282	435036804R1	RN72K1J-680JE,Chip carbon
R2287,R2387,R2388	435033334R1	RN72K1J-333JE,Chip carbon
R2289,R2302,2313	435034724R1	RN72K1J-472JE,Chip carbon
R2290,R2311,R2316	435037514R1	RN72K1J-751JE,Chip carbon
R2291,R2312,R2317	435036814R1	RN72K1J-681JE,Chip carbon
R2292,R2293,R2427	435034714R1	RN72K1J-471JE,Chip carbon
R2296,R2306,R2307	435031014R1	RN72K1J-101JE,Chip carbon
R2299,R2303,R2304	435031824R1	RN72K1J-182JE,Chip carbon
R2300,R2333	435032224R1	RN72K1J-222JE,Chip carbon
R2308,R2332,R2342	435031824R1	RN72K1J-182JE,Chip carbon
R2310,R2315,R2330	435031034R1	RN72K1J-103JE,Chip carbon
R2314,R2318,R2320	435031014R1	RN72K1J-101JE,Chip carbon
R2319	435034724R1	RN72K1J-472JE,Chip carbon
R2321,R2322,R2323	435037504R1	RN72K1J-750JE,Chip carbon
R2324,R2326,R2327	435037504R1	RN72K1J-750JE,Chip carbon
R2325,R2390,R2391	435035634R1	RN72K1J-563JE,Chip carbon
R2328	435031044R1	RN72K1J-104JE,Chip carbon
R2331,R2334,R2335	435031034R1	RN72K1J-103JE,Chip carbon
R2336,R2337,R2338	435037504R1	RN72K1J-750JE,Chip carbon
R2340,R2341,R2357	435031034R1	RN72K1J-103JE,Chip carbon
R2343,R2345	435031824R1	RN72K1J-182JE,Chip carbon
R2347	435031524R1	RN72K1J-152JE,Chip carbon
R2348,R2349,R2350	435037504R1	RN72K1J-750JE,Chip carbon
R2351,R2352,R2353	435037504R1	RN72K1J-750JE,Chip carbon
R2354,R2355,R2356	435037504R1	RN72K1J-750JE,Chip carbon
R2358,R2359,R2363	435031034R1	RN72K1J-103JE,Chip carbon
R2367,R2368,R2369	435032214R1	RN72K1J-221JE,Chip carbon
R2370,R2371,R2398	435032214R1	RN72K1J-221JE,Chip carbon
R2372,R2373,R2374	435031034R1	RN72K1J-103JE,Chip carbon
R2375,R2376,R2377	435031034R1	RN72K1J-103JE,Chip carbon
R2378,R2379,R2380	435031034R1	RN72K1J-103JE,Chip carbon
R2381,R2382,R2383	435031034R1	RN72K1J-103JE,Chip carbon
R2384,R2385,R2386	435031024R1	RN72K1J-102JE,Chip carbon
R2389,R2445	435033334R1	RN72K1J-333JE,Chip carbon
R2392,R2444	435035634R1	RN72K1J-563JE,Chip carbon
R2396,R2448,R2451	435031034R1	RN72K1J-103JE,Chip carbon
R2397,R2411,R2418	435031014R1	RN72K1J-101JE,Chip carbon
R2399,R2400,R2403	435032214R1	RN72K1J-221JE,Chip carbon
R2401,R2402,R2405	435030004R1	RN72K1J-000JE,Chip carbon
R2404,R2407,R2408	435032214R1	RN72K1J-221JE,Chip carbon
R2406,R2432,R2433	435030004R1	RN72K1J-000JE,Chip carbon
R2415,R2416,R2419	435037504R1	RN72K1J-750JE,Chip carbon
R2421,R2422	435037504R1	RN72K1J-750JE,Chip carbon
R2424,R2425,R2426	435032214R1	RN72K1J-221JE,Chip carbon
R2430	435032214R1	RN72K1J-221JE,Chip carbon
R2438,R2439,R2440	435032204R1	RN72K1J-220JE,Chip carbon
R2442,R2443	435035604R1	RN72K1J-560JE,Chip carbon
R2446	435031024R1	RN72K1J-102JE,Chip carbon
R2447	435034714R1	RN72K1J-471JE,Chip carbon

R2449	435031014R1	RN72K1J-101JE,Chip carbon
R2450	435031204R1	RN72K1J-120JE,Chip carbon
Relays		
RL2201,RL2202,RL2203	25065662R2	NPL-2P2A-DC24-177
RL2204,RL2206 ,RL2207	25065662R2	NPL-2P2A-DC24-177
RL2208,RL2209,RL2210	25065662R2	NPL-2P2A-DC24-177
RL2209,RL2210	25065662R2	NPL-2P2A-DC24-177

CIRCUIT NO.	PART NO.	DESCRIPTION
Terminals		
P2006,P2007	25045728	NPJ-15PDBY516
P2008,P2205	25045730	NPJ-10PDBY518
P2206,P2207	25045764	NPJ-6PDGLR548
Sockets		
P2004	25052814R2	IMSA-9850S-22Y900
P2005	25052813R2	IMSA-9850S-20Y900
P2202	25052818R2	IMSA-9850S-30Y900
Plugs		
P2001,P2002,P2204	25056329R2	IMSA-9850B-30Y902
P2210	25056210R2	IMSA-9850B-30Y900
P2211	25056205R2	IMSA-9850B-20Y900
P2212	25056206R2	IMSA-9850B-22Y900
Tapes		
A001	29110082	8mm, Cloth
A002	29110083	16mm, Cloth

SLOT J PC BOARD (NAVD-8205-1A)

Except 120V model

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q2501,Q2503	22241442R2	MAX4218ESD
Transistors		
Q2502	2214460R2 or 2216330R2	RN1401 or KRC101S
Diodes		
D2501,D2502	223234R2 or 223269R2	1SS352 or 1SS355,Chip
Capacitors		
C2501,C2503	356742219R2	CEWX16V-220M,Chip elect.
C2502,C2504,C2505	332161040R1	CK725F1E-104Z1,Chip ceramic
C2506,C2508	356741019R2	CEWX16V-100M,Chip elect.
C2507,C2509,C2520	332161040R1	CK725F1E-104Z1,Chip ceramic
C2517,C2518,C2519	356742219R2	CEWX16V-220M,Chip elect.
C2521,C2522	332161040R1	CK725F1E-104Z1,Chip ceramic
Resistors		
R2501,R2513,R2514	435031014R1	RN72K1J-101JE,Chip carbon
R2502,R2511,R2512	435031034R1	RN72K1J-103JE,Chip carbon
R2503	435031224R1	RN72K1J-122JE,Chip carbon
R2504,R2505,R2506	435030004R1	RN72K1J-000JE,Chip carbon
R2507,R2508,R2509	435032204R1	RN72K1J-220JE,Chip carbon
R2515,R2523,R2528	435031014R1	RN72K1J-101JE,Chip carbon
R2516,R2524,R2529	435031034R1	RN72K1J-103JE,Chip carbon
R2517,R2527,R2532	435036824R1	RN72K1J-682JE,Chip carbon
R2518,R2519,R2525	435036814R1	RN72K1J-681JE,Chip carbon
R2520,R2521,R2522	435030004R1	RN72K1J-000JE,Chip carbon
R2526,R2530,R2531	435036814R1	RN72K1J-681JE,Chip carbon
R2533,R2534,R2535	435037504R1	RN72K1J-750JE,Chip carbon
R2536,R2540,R2541	435037504R1	RN72K1J-750JE,Chip carbon
R2537,R2538,R2539	435031034R1	RN72K1J-103JE,Chip carbon
Relays		
RL2501,RL2502,RL2503	25065662R2	NPL-2P2A-DC24-177
Terminals		
P2502,P2503	25045760	P2298-C
Plug		
P2501	25056329R2	IMSA-9850B-30Y902
Tape		
A001	29110083	16mm, Cloth

SLOT J PC BOARD (NAVD-8207-1A)

120V model only

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q2601,Q2603	22241442R2	MAX4218ESD
Transistors		
Q2602	2214460R2 or 2216330R2	RN1401 or KRC101S
Diodes		
D2601,D2602	223234R2 or 223269R2	1SS352 or 1SS355,Chip

	Capacitors	
C2601,C2603	356742219R2	CEWX16V-220M,Chip elect.
C2602,C2604,C2605	332161040R1	CK725F1E-104Z1,Chip ceramic
C2606,C2608	356741019R2	CEWX16V-100M,Chip elect.
C2607,C2609,C2620	332161040R1	CK725F1E-104Z1,Chip ceramic
C2611,C2612,C2613	342111024R1	CC725CH1E-102J1,Chip ceramic
C2614,C2615,C2616	342111024R1	CC725CH1E-102J1,Chip ceramic
C2617,C2618,C2619	356742219R2	CEWX16V-220M,Chip elect.
C2621,C2622	332161040R1	CK725F1E-104Z1,Chip ceramic

CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R2601,R2613,R2614	435031014R1	RN72K1J-101JE,Chip carbon
R2602,R2611,R2612	435031034R1	RN72K1J-103JE,Chip carbon
R2603,R2604	435030004R1	RN72K1J-000JE,Chip carbon
R2605,R2606	435030004R1	RN72K1J-000JE,Chip carbon
R2607,R2608,R2609	435032204R1	RN72K1J-220JE,Chip carbon
R2615,R2623,R2628	435031014R1	RN72K1J-101JE,Chip carbon
R2617,R2627,R2632	435036824R1	RN72K1J-682JE,Chip carbon
R2618,R2619,R2625	435036814R1	RN72K1J-681JE,Chip carbon
R2620,R2621,R2622	435030004R1	RN72K1J-000JE,Chip carbon
R2624,R2629,R2637	435031034R1	RN72K1J-103JE,Chip carbon
R2626,R2630,R2631	435036814R1	RN72K1J-681JE,Chip carbon
R2633,R2634,R2635	435037504R1	RN72K1J-750JE,Chip carbon
R2636,R2640,R2641	435037504R1	RN72K1J-750JE,Chip carbon
R2638,R2639	435031034R1	RN72K1J-103JE,Chip carbon
	Terminals	
P2602,P2605	25045762	NPJ-1PDG546
P2603,P2606	25045763	NPJ-1PDL547
P2604,P2607	25045761	NPJ-1PDR545
	Plug	
P2601	25056329R2	IMSA-9850B-30Y902
	Relays	
RL2601,RL2602,RL2603	25065662R2	NPL-2P2A-DC24-177
	Tape	
A001	29110083	16mm,Cloth

DISPLAY CIRCUIT PC BOARD(NADIS-8218-1A)
STANDBY SWITCH PC BOARD(NAETC-8219-1A)
OPERATION SWITCH PC BOARD (NAETC-8220-1A)
HEADPHONE TERMINAL PC BOARD (NAETC-8221-1A)
FRONT OPTICAL PC BOARD(NAETC-8222-1A)
FRONT VIDEO PC BOARD(NAETC-8223-1A)
VOLUME PC BOARD(NAETC-8224-A1)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q7602	212248	16-BT-117GN
	ICs	
Q7601	W0004R300912M100	MPD78F0233GC-8BT(NR1000)
	Program of IC Q7601 can't be loaded with Updater.	
Q7603,Q7604	22241680AR2	M66005-0001AFP
	Transistors	
Q7501,Q7502,Q7503	2214470R2	RN1402
Q7504,Q7505,Q7506	2214470R2	RN1402
Q7507,Q7508,Q7509	2214470R2	RN1402
Q7510,Q7511,Q7512	2214470R2	RN1402
Q7513,Q7514,Q7515	2214470R2	RN1402
Q7541,Q7542,Q7543	2214470R2	RN1402
Q7544,Q7545,Q7546	2214470R2	RN1402
Q7547,Q7548,Q7549	2214470R2	RN1402
Q7550,Q7551,Q7552	2214470R2	RN1402
Q7553,Q7554	2214470R2	RN1402
	Diodes	
D7501,D7502,D7503	225432R2	LBH1000B-E3,LED
D7504,D7505,D7506	225432R2	LBH1000B-E3,LED
D7507,D7508,D7509	225432R2	LBH1000B-E3,LED
D7510,D7511,D7512	225432R2	LBH1000B-E3,LED
D7513,D7514,D7515	225432R2	LBH1000B-E3,LED
D7521,D7522,D7523	225434R2	SML-512UWT86,LED
D7524,D7525,D7526	225434R2	SML-512UWT86,LED
D7527,D7528,D7529	225434R2	SML-512UWT86,LED
D7530,D7531,D7532	225434R2	SML-512UWT86,LED
D7533,D7534	225434R2	SML-512UWT86,LED
D7541,D7542,D7543	225433R2	LGH1000B-H3,LED
D7544,D7545,D7546	225433R2	LGH1000B-H3,LED
D7547,D7548,D7549	225433R2	LGH1000B-H3,LED
D7550,D7551,D7552	225433R2	LGH1000B-H3,LED
D7553,D7554	225433R2	LGH1000B-H3,LED
D7560	225290	SEL4110R,LED

D7701	223234R2 or 223269R2	1SS352 or 1SS355,Chip
D7801	224550680R2	UDZS6.8B,Zener
U7501	Remote sensor 241336	PIC-37043TH2
U7951	Photo couplers 24120108	GP1FA513RZ
X7501	Oscillator 3010242	CST5.00MGW,Ceramic
L7601,L7701,L7702	Coils 231237M022R2	NCH-1471,Choke
R7582,R7583,R7585	Filters 230955R2	BK1608HS102-T,EMI
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C7581,C7582,C7707	342101014R1	CC725CH1H-101J1,Chip ceramic
C7585,C7624,C7625	332161040R1	CK725F1E-104Z1,Chip ceramic
C7601,C7809	375524744	MMT50V-474J,Plastic film
C7602,C7603,C7703	355721019	CE04W6.3V-100M,Elect.
C7659,C7806,C7812	332161040R1	CK725F1E-104Z1,Chip ceramic
C7708,C7709	342101014R1	CC725CH1H-101J1,Chip ceramic
C7719,C7720,C7721	342111024R1	CC725CH1E-102J1,Chip ceramic
C7722,C7726,C7727	342111024R1	CC725CH1E-102J1,Chip ceramic
C7728,C7729,C7730	342111024R1	CC725CH1E-102J1,Chip ceramic
C7731,C7732,C7808	342111024R1	CC725CH1E-102J1,Chip ceramic
C7801,C7802,C7803	337621030R1	CK732F1H-103Z,Chip ceramic
C7804	355781009	CE04W50V-10M,Elect.
C7805	342104704R1	CC725CH1H-470J1,Chip ceramic
C7807,C7811	332151030R1	CK725F1H-103Z1,Chip ceramic
C7810	355721019	CE04W6.3V-100M,Elect.
C7901,C7902	342104714R1	CC725CH1H-471J1,Chip ceramic
C7903,C7904,C7952	332161040R1	CK725F1E-104Z1,Chip ceramic
C7951	394621017	CE04W6.3V-100M(VR),Elect.
	Resistors	
R7807	49163103415	RM1/101J-10K*15
R7502,R7512	435023314R1	RN72W1J-331JE,Chip carbon
R7503,R7513	435024714R1	RN72W1J-471JE,Chip carbon
R7504,R7514	435035614R1	RN72K1J-561JE,Chip carbon
R7505,R7515	435038214R1	RN72K1J-821JE,Chip carbon
R7506,R7516,R7526	435031224R1	RN72K1J-122JE,Chip carbon
R7507	435032224R1	RN72K1J-222JE,Chip carbon
R7507	435032224R1	RN72K1J-222JE,Chip carbon
R7508,R7509,R7510	435034724R1	RN72K1J-472JE,Chip carbon
R7511,R7619,R7620	435034724R1	RN72K1J-472JE,Chip carbon
R7517	435032224R1	RN72K1J-222JE,Chip carbon
R7517	435032224R1	RN72K1J-222JE,Chip carbon
R7518,R7528	435033924R1	RN72K1J-392JE,Chip carbon
R7522,R7532	435023314R1	RN72W1J-331JE,Chip carbon
R7523,R7533	435024714R1	RN72W1J-471JE,Chip carbon
R7524,R7534	435035614R1	RN72K1J-561JE,Chip carbon
R7525,R7535	435038214R1	RN72K1J-821JE,Chip carbon
R7527,R7537	435032224R1	RN72K1J-222JE,Chip carbon
R7536	435031224R1	RN72K1J-122JE,Chip carbon
R7539,R7540,R7541	435031514R1	RN72K1J-151JE,Chip carbon
R7542,R7543	435031514R1	RN72K1J-151JE,Chip carbon
R7605,R7617,R7632	435031034R1	RN72K1J-103JE,Chip carbon
R7606,R7607,R7608	435032214R1	RN72K1J-221JE,Chip carbon
R7609,R7610,R7613	435032214R1	RN72K1J-221JE,Chip carbon
R7611,R7612	435031004R1	RN72K1J-100JE,Chip carbon
R7614,R7951	435032214R1	RN72K1J-221JE,Chip carbon
R7615,R7626,R7627	435031024R1	RN72K1J-102JE,Chip carbon
R7621,R7622	435034724R1	RN72K1J-472JE,Chip carbon
R7628,R7629,R7630	435031024R1	RN72K1J-102JE,Chip carbon
R7631,R7634,R7636	435031024R1	RN72K1J-102JE,Chip carbon
R7633,R7710,R7717	435031034R1	RN72K1J-103JE,Chip carbon
R7635	435031014R1	RN72K1J-101JE,Chip carbon
R7637,R7638,R7639	435031024R1	RN72K1J-102JE,Chip carbon
R7640,R7641,R7642	435031024R1	RN72K1J-102JE,Chip carbon
R7643,R7644,R7645	435031024R1	RN72K1J-102JE,Chip carbon
R7646,R7647,R7648	435031024R1	RN72K1J-102JE,Chip carbon
R7649,R7650,R7651	435031024R1	RN72K1J-102JE,Chip carbon
R7652,R7663,R7664	435031024R1	RN72K1J-102JE,Chip carbon
R7653,R7654,R7655	435033914R1	RN72K1J-391JE,Chip carbon
R7656,R7657,R7658	435033914R1	RN72K1J-391JE,Chip carbon
R7661,R7662,R7670	435033914R1	RN72K1J-391JE,Chip carbon
R7665,R7666,R7667	435031024R1	RN72K1J-102JE,Chip carbon
R7668,R7669,R7671	435031024R1	RN72K1J-102JE,Chip carbon
R7672,R7674,R7676	435033914R1	RN72K1J-391JE,Chip carbon
R7673,R7675,R7677	435031024R1	RN72K1J-102JE,Chip carbon
R7678,R7680	435033914R1	RN72K1J-391JE,Chip carbon

R7679,R7701	435031024R1	RN72K1J-102JE,Chip carbon
R7719,R7720	435032724R1	RN72K1J-272JE,Chip carbon
R7721,R7722	435032724R1	RN72K1J-272JE,Chip carbon
R7726,R7727,R7728	435031034R1	RN72K1J-103JE,Chip carbon
R7729,R7730,R7731	435031034R1	RN72K1J-103JE,Chip carbon
R7732,R7808,R7830	435031034R1	RN72K1J-103JE,Chip carbon
R7801,R7802	435032714R1	RN72K1J-271JE,Chip carbon
R7803,R7804	435035634R1	RN72K1J-563JE,Chip carbon
R7805,R7806	435035634R1	RN72K1J-563JE,Chip carbon
R7809	435031234R1	RN72K1J-123JE,Chip carbon
R7831	435031034R1	RN72K1J-103JE,Chip carbon
R7901,R7902	435033314R1	RN72K1J-331JE,Chip carbon
R7903,R7904,R7905	435037504R1	RN72K1J-750JE,Chip carbon

CIRCUIT NO.	PART NO.	DESCRIPTION
	Switches	
S7501,S7503,S7505	25035718	NPS-111-S681
S7506,S7507,S7511	25035718	NPS-111-S681
S7512,S7513,S7514	25035718	NPS-111-S681
S7515,S7516,S7517	25035718	NPS-111-S681
S7518,S7521,S7522	25035718	NPS-111-S681
S7523,S7524,S7525	25035718	NPS-111-S681
S7526,S7527,S7528	25035718	NPS-111-S681
S7531,S7532,S7533	25035718	NPS-111-S681
S7534,S7535	25035718	NPS-111-S681
S7536,S7537	25035718	NPS-111-S681
S7641	25065596	EC16B36C25
S7642,S7643	25065666	EC11B30CM17
	Terminals	
P7581	25045385	YKB26-5153,Headphone
P7901	25045678	NPJ-3PDB475,Front video
	Sockets	
P3125	2009990849UL	NSAS-10P1265
P3126	2009990848UL	NSAS-6P1264
P3127	2009990850UL	NSAS-6P1266
P7501	25052586R2	NSCT-20P2483
P7502B	200HE391625UL	NSAS-16P1227
P7503A	200EE390810	NSAS-8P1256
P7902	25051569	NSCT-4P1356
	Plugs	
P7502A	25055994	NPLG-8P946
P7506B	25055135	NPLG-5P119
	Holder	
Q7602A	27190987A	(FL)

NET-TUNE CIRCUIT PC BOARD(NADG-8228-1A)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q601	22241778R2	BA33C25FP
Q603	22241861R3 or 22241910R3	HM5264165FTT-B6 or IC42S16400-7T
Q604	22241862R3	MX29LV320ABTC-90
Q606	22241872R2	93LC46BT/SN
Q607	22241863R3	EP7312-CV
Q608	22241861R3 or 22241910R3	HM5264165FTT-B6 or IC42S16400-7T
Q609	22241161R2	TC7W14FU
Q610	22241159R2	TC7S02FU
Q616	22241867R3	CS8900A-CQ3
Q617	22274004HR2TO	TC74VHC04FT
Q618,Q619	22274074ER2TO	TC74VHC74FT
	Diode	
D603	225385R2	SEC1201C,LED
	Coils	
L601	230949R2	BLM21PG221SN1,Choke
L603	3030048R2	NFE31PT471F1E9,EMI
L605,L606	230949R2	BLM21PG221SN1,Choke
R639,R640,R641	230955R2	BK1608HS102-T,EMI
	Oscillators	
X601	3010374R2	DSO-751SV
X602	3010371R2	DSX630G
X603	3010372R2	SM-26F
X604	3010373R2	SMD-49
	Capacitors	
C551,C560,C561	332161040R1	CK725F1E-104Z1,Chip ceramic
C562,C563,C564	332161040R1	CK725F1E-104Z1,Chip ceramic
C565,C566,C567	332161040R1	CK725F1E-104Z1,Chip ceramic
C568,C569,C570	332161040R1	CK725F1E-104Z1,Chip ceramic
C571,C603,C604	332161040R1	CK725F1E-104Z1,Chip ceramic

C602	395530477R2	F93-10V-4.7M,Chip tantal
C605,C606,C607	332161040R1	CK725F1E-104Z1,Chip ceramic
C608,C609,C610	332161040R1	CK725F1E-104Z1,Chip ceramic
C611,C612,C613	332161040R1	CK725F1E-104Z1,Chip ceramic
C614	395544707R2	F93-16V-47M,Chip tantal
C615	395521017R2	F93-6.3V-100M,Chip tantal
C616,C617,C618	332161040R1	CK725F1E-104Z1,Chip ceramic
C619,C620,C621	332161040R1	CK725F1E-104Z1,Chip ceramic
C622,C623,C624	332161040R1	CK725F1E-104Z1,Chip ceramic
C625,C626,C627	332161040R1	CK725F1E-104Z1,Chip ceramic
C628	342105614R1	CC725CH1H-561J1,Chip ceramic
C629,C630,C631	332161040R1	CK725F1E-104Z1,Chip ceramic
C633,C634	332101035R1	CK725B1H-103K1,Chip ceramic
C642,C643,C646	332161040R1	CK725F1E-104Z1,Chip ceramic
C652,C653,C654	332161040R1	CK725F1E-104Z1,Chip ceramic
C655,C658,C659	332161040R1	CK725F1E-104Z1,Chip ceramic
C656,C657,C683	342101002R1	CC725CH1H-100D1,Chip ceramic
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C660,C661,C662	332161040R1	CK725F1E-104Z1,Chip ceramic
C663,C664,C665	332161040R1	CK725F1E-104Z1,Chip ceramic
C666,C667,C668	332161040R1	CK725F1E-104Z1,Chip ceramic
C669,C672,C673	332161040R1	CK725F1E-104Z1,Chip ceramic
C674,C677,C680	332101025R1	CK725B1H-102K1,Chip ceramic
C682	342105604R1	CC725CH1H-560J1,Chip ceramic
C685,C686	342101504R1	CC725CH1H-150J1,Chip ceramic
C687,C688,C689	332161040R1	CK725F1E-104Z1,Chip ceramic
C690,C692	332161040R1	CK725F1E-104Z1,Chip ceramic
	Resistors	
R550,R551,R552	435031034R1	RN72K1J-103JE,Chip carbon
R553,R554	435031012R1	RN72K1J-101FE,Chip carbon
R555,R556	435032734R1	RN72K1J-273JE,Chip carbon
R557,R609,R611	435031034R1	RN72K1J-103JE,Chip carbon
R601,R602	435031012R1	RN72K1J-101FE,Chip carbon
R603,R604	435030004R1	RN72K1J-000JE,Chip carbon
R605,R607	435030822R1	RN72K1J-082FE,Chip carbon
R606	435033314R1	RN72K1J-331JE,Chip carbon
R612,R613,R614	435031034R1	RN72K1J-103JE,Chip carbon
R615,R617,R618	435031034R1	RN72K1J-103JE,Chip carbon
R619,R624	435031514R1	RN72K1J-151JE,Chip carbon
R623,R627,R630	435031034R1	RN72K1J-103JE,Chip carbon
R628,R629,R700	435030004R1	RN72K1J-000JE,Chip carbon
R642,R698	435031032R1	RN72K1J-103FE,Chip carbon
R643,R644,R645	435031034R1	RN72K1J-103JE,Chip carbon
R646,R647,R649	435031034R1	RN72K1J-103JE,Chip carbon
R650	435034734R1	RN72K1J-473JE,Chip carbon
R651,R659,R660	435031034R1	RN72K1J-103JE,Chip carbon
R655,R656	435031024R1	RN72K1J-102JE,Chip carbon
R662,R663,R664	435031034R1	RN72K1J-103JE,Chip carbon
R665,R666,R667	435031034R1	RN72K1J-103JE,Chip carbon
R669,R687,R688	435031034R1	RN72K1J-103JE,Chip carbon
R682	435031014R1	RN72K1J-101JE,Chip carbon
R689,R690	435031034R1	RN72K1J-103JE,Chip carbon
R691,R692	435031034R1	RN72K1J-103JE,Chip carbon
R699	435032754R1	RN72K1J-275JE,Chip carbon
	Socket	
P601	25052724	NSCT-8P2620
	Plugs	
P3102A	25056329R2	IMSA-9850B-30Y902
P607B	25055978R2	NPLG-5P931
	Terminals	
E601,E603	25065425	NEGITANSI M3

SLOT L(HDMI) PC BOARD (NAVD-8137-1A)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q8001	22242049R3	SiI504
Q8002	22242050R9	MC504,Mask microprocessor
Q8003	22242056R2 or	IC42S32200L-7TG or
	22242031R3	IS42S32200B-7T
Q8007,Q8106	22241648R2	LM1117MPX-ADJ
Q8101	22242153R3	ADV7402KST-110
Q8102,Q8857	22241465R2	LA7106MFP
Q8103,Q8910	22241440R2	MAX4018ESD
Q8104,Q8105	2227C244DR2TO	TC74VXC162244FT
Q8191,Q8591	22278033DR2NE or	MPC2933T or
	22278033DR2JR	NJM2391DL1-33
Q8301	22242052R3	SiI9190CTG64
Q8304,Q8402	22242087R2	NJM2860F3-33
Q8305	22242105R2	NJM2860F3-05

Q8350	22242098R2	CS8420-CS
Q8351	22240935R2	TC7WU04FU
Q8352	22242078R2TO	TC7WZU04FU
Q8353	22274074ER2TO	TC74VHC74FT
Q8401	22242053R3	SiI160CTG100
Q8501,Q8601	22242162R3	SiI1161CTU
Q8502,Q8602	22242087R2	NJM2860F3-33
Q8701	W0006R300894M100	MPD70F3261YGC-8EA(DVSP1000)
Q8702	22242070R2	BR24L08FV-W
Q8801	22242058R3	ADV7310
Q8802	22278025DR2JR or	NJM2391DL1-25 or
	22278025DR2NE	MPC2925T
	Transistors	
Q8306	2216131R2 or	HN1C03F-A or
	2216141R2	HN1C03F-B
Q8307	2216410R2	2SA1774
Q8308,Q8505,Q8605	2216400R2	2SB1132
Q8309,Q8503	226066R2	UM6K1N,Array
Q8506,Q8606	2216390R2	DTC144EE
CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistors	
Q8507,Q8607	2216380R2	DTA144EE
Q8508,Q8603	226066R2	UM6K1N,Array
Q8509,Q8858	2216520R2	2SK3019
Q8901,Q8902,Q8903	2214375R2	2SA1162-GR
	Diodes	
D8101,D8102,D8103	223266R2	1SS226,Chip
D8104,D8105,D8106	223266R2	1SS226,Chip
D8701	223269R2	1SS355,Chip
	Coils	
L8001,L8002,L8003	231237M022R2	NCH-1471,Choke
L8004,L8101,L8103	231237M022R2	NCH-1471,Choke
L8102	231237K470R2	NCH-1479,Choke
L8104,L8105,L8302	231237M022R2	NCH-1471,Choke
L8301,L8303,L8401	231237M047R2	NCH-1473,Choke
L8304,L8350,L8351	231237M022R2	NCH-1471,Choke
L8352,L8354,8355	230958R1	BK1608LM182-T,EMI
L8402,L8801,L8802	231237M022R2	NCH-1471,Choke
L8403,L8404,L8405	231237M047R2	NCH-1473,Choke
L8501,L8502,L8503	231237M047R2	NCH-1473,Choke
L8504,L8601,L8602	231237M047R2	NCH-1473,Choke
L8603,L8604,L8701	231237M047R2	NCH-1473,Choke
L8803	231237M022R2	NCH-1471,Choke
R8102,R8104,R8106	230984R1	BK1608HS601-T,EMI
	Oscillators	
X8001	3010389R2	FCX03-20.000MHz
X8101	3010353R2	FCX-03-27MHz
X8350	3010323R2	HC-49/U03C 12.288MHz
X8701	3010356R2	CSTCR5M00G53-B0,Ceramic
	Composite parts	
L8901,L8902,L8903	3030049R2	CY4W(15MHz),LC
R8004,R8005,R8006	43484710004R2	RM7LJ100X04,CR
R8007,R8008,R8009	43484710004R2	RM7LJ100X04,CR
R8010,R8011	43484710004R2	RM7LJ100X04,CR
R8123,R8129,R8130	43484722004R2	RM7LJ220X04,Composite
R8131,R8134,R8137	43484722004R2	RM7LJ220X04,Composite
R8138,R8139,R8140	43484722004R2	RM7LJ220X04,Composite
R8141,R8181,R8182	43484722004R2	RM7LJ220X04,Composite
R8183,R8184,R8185	43484722004R2	RM7LJ220X04,Composite
R8186,R8511,R8512	43484722004R2	RM7LJ220X04,Composite
R8315,R8316,R8317	43484700004R2	RM7LJ000X04,Composite
R8318,R8320,R8321	43484700004R2	RM7LJ000X04,Composite
R8513,R8514,R8515	43484722004R2	RM7LJ220X04,Composite
R8516,R8524,R8525	43484722004R2	RM7LJ220X04,Composite
R8524,R8525,R8526	43484722004R2	RM7LJ220X04,Composite
R8527,R8528,R8529	43484722004R2	RM7LJ220X04,Composite
R8611,R8612,R8613	43484722004R2	RM7LJ220X04,Composite
R8614,R8615,R8616	43484722004R2	RM7LJ220X04,Composite
R8624,R8625,R8626	43484722004R2	RM7LJ220X04,Composite
R8627,R8628,R8629	43484722004R2	RM7LJ220X04,Composite
R8728	43484710304R2	RM7LJ103X04,Composite
R8821,R8822,R8823	43484700004R2	RM7LJ000X04,Composite
R8824,R8825,R8826	43484700004R2	RM7LJ000X04,Composite
R8827,R8828	43484700004R2	RM7LJ000X04,Composite
	Capacitors	
C8001,C8002,C8003	332181050R1	CK725F1A-105Z1,Chip ceramic
C8004,C8006,C8010	332181050R1	CK725F1A-105Z1,Chip ceramic
C8005,C8333	342101002R1	CC725CH1H-100D1,Chip ceramic
C8011,C8012,C8013	332181050R1	CK725F1A-105Z1,Chip ceramic
C8014,C8020,C8021	332181050R1	CK725F1A-105Z1,Chip ceramic

C8019,C8108,C8109	332161040R1	CK725F1E-104Z1,Chip ceramic
C8022,C8023,C8024	332181050R1	CK725F1A-105Z1,Chip ceramic
C8025,C8026,C8027	332181050R1	CK725F1A-105Z1,Chip ceramic
C8028,C8029,C8031	332181050R1	CK725F1A-105Z1,Chip ceramic
C8030,C8035,C8119	342101024R1	CC725CH1H-102J1,Chip ceramic
C8032,C8078,C8142	356742209R2	CEWX16V-22M,Chip elect.
C8033,C8040,C8045	332181050R1	CK725F1A-105Z1,Chip ceramic
C8034,C8120	342101014R1	CC725CH1H-101J1,Chip ceramic
C8036,C8038	342101204R1	CC725CH1H-120J1,Chip ceramic
C8041,C8042,C8043	3567A2219R2	CEWX4V-220M,Chip elect.
C8044,C8305,C8311	3567A2219R2	CEWX4V-220M,Chip elect.
C8046,C8047,C8048	332181050R1	CK725F1A-105Z1,Chip ceramic
C8049,C8050,C8051	332181050R1	CK725F1A-105Z1,Chip ceramic
C8052,C8053,C8054	332181050R1	CK725F1A-105Z1,Chip ceramic
C8055,C8056,C8301	332181050R1	CK725F1A-105Z1,Chip ceramic
C8077,C8110,C8111	356741009R2	CEWX16V-10M,Chip elect.
C8079,C8101,C8135	3567A1019R2	CEWX4V-100M,Chip elect.
C8102,C8103,C8104	332121045R1	CK725B1C-104K1,Chip ceramic
C8105,C8106,C8107	332121045R1	CK725B1C-104K1,Chip ceramic
C8112,C8113,C8114	332161040R1	CK725F1E-104Z1,Chip ceramic
C8115,C8116,C8121	332161040R1	CK725F1E-104Z1,Chip ceramic
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C8117,C8118,C8141	356741009R2	CEWX16V-10M,Chip elect.
C8122,C8123,C8124	332161040R1	CK725F1E-104Z1,Chip ceramic
C8125,C8126,C8129	332161040R1	CK725F1E-104Z1,Chip ceramic
C8127	332101035R1	CK725B1H-103K1,Chip ceramic
C8128,C8808,C8810	332121045R1	CK725B1C-104K1,Chip ceramic
C8130,C8131,C8139	332161040R1	CK725F1E-104Z1,Chip ceramic
C8133,C8134	342101504R1	CC725CH1H-150J1,Chip ceramic
C8136,C8137,C8138	3567A1019R2	CEWX4V-100M,Chip elect.
C8140,C8151,C8152	332161040R1	CK725F1E-104Z1,Chip ceramic
C8143,C8192,C8592	3567A1019R2	CEWX4V-100M,Chip elect.
C8153,C8154,C8851	356721019R2	CEWX6.3V-100M,Chip elect.
C8191,C8591,C8901	332161040R1	CK725F1E-104Z1,Chip ceramic
C8302,C8304,C8306	332181050R1	CK725F1A-105Z1,Chip ceramic
C8303,C8307,C8315	342101024R1	CC725CH1H-102J1,Chip ceramic
C8308,C8309,C8312	332181050R1	CK725F1A-105Z1,Chip ceramic
C8313,C8320,C8323	3567A2219R2	CEWX4V-220M,Chip elect.
C8314,C8316,C8317	332181050R1	CK725F1A-105Z1,Chip ceramic
C8318,C8321,C8322	332181050R1	CK725F1A-105Z1,Chip ceramic
C8326,C8327,C8329	332181050R1	CK725F1A-105Z1,Chip ceramic
C8328,C8355	356742209R2	CEWX16V-22M,Chip elect.
C8330,C8332,C8350	332181050R1	CK725F1A-105Z1,Chip ceramic
C8331	356741009R2	CEWX16V-10M,Chip elect.
C8351,C8354,C8356	332181050R1	CK725F1A-105Z1,Chip ceramic
C8352	332102225R1	CK725B1H-222K1,Chip ceramic
C8353	332104735R1	CK725B1H-473K1,Chip ceramic
C8357,C8358	342101204R1	CC725CH1H-120J1,Chip ceramic
C8359,C8398,C8399	332181050R1	CK725F1A-105Z1,Chip ceramic
C8401,C8402,C8405	332181050R1	CK725F1A-105Z1,Chip ceramic
C8404,C8412,C8416	3567A2219R2	CEWX4V-220M,Chip elect.
C8406,C8425,C8516	342101024R1	CC725CH1H-102J1,Chip ceramic
C8407,C8408,C8409	332181050R1	CK725F1A-105Z1,Chip ceramic
C8410,C8411,C8413	332181050R1	CK725F1A-105Z1,Chip ceramic
C8414,C8415,C8417	332181050R1	CK725F1A-105Z1,Chip ceramic
C8418,C8421,C8423	3567A2219R2	CEWX4V-220M,Chip elect.
C8419,C8420,C8422	332181050R1	CK725F1A-105Z1,Chip ceramic
C8424,C8426,C8427	332181050R1	CK725F1A-105Z1,Chip ceramic
C8428,C8501,C8502	332181050R1	CK725F1A-105Z1,Chip ceramic
C8503,C8504,C8505	332181050R1	CK725F1A-105Z1,Chip ceramic
C8506,C8507,C8508	332181050R1	CK725F1A-105Z1,Chip ceramic
C8509,C8510,C8511	332181050R1	CK725F1A-105Z1,Chip ceramic
C8512,C8513,C8515	332181050R1	CK725F1A-105Z1,Chip ceramic
C8514,C8518,C8521	3567A2219R2	CEWX4V-220M,Chip elect.
C8517,C8519,C8520	332181050R1	CK725F1A-105Z1,Chip ceramic
C8522,C8523,C8526	332181050R1	CK725F1A-105Z1,Chip ceramic
C8524,C8525,C8614	3567A2219R2	CEWX4V-220M,Chip elect.
C8527,C8597,C8598	332181050R1	CK725F1A-105Z1,Chip ceramic
C8528,C8628	356781009R2	CEWX50V-10M,Chip elect.
C8599,C8601,C8602	332181050R1	CK725F1A-105Z1,Chip ceramic
C8603,C8604,C8605	332181050R1	CK725F1A-105Z1,Chip ceramic
C8606,C8607,C8608	332181050R1	CK725F1A-105Z1,Chip ceramic
C8609,C8610,C8611	332181050R1	CK725F1A-105Z1,Chip ceramic
C8612,C8613,C8615	332181050R1	CK725F1A-105Z1,Chip ceramic
C8616,C8805	342101024R1	CC725CH1H-102J1,Chip ceramic
C8617,C8619,C8620	332181050R1	CK725F1A-105Z1,Chip ceramic
C8618,C8621,C8624	3567A2219R2	CEWX4V-220M,Chip elect.
C8622,C8623,C8626	332181050R1	CK725F1A-105Z1,Chip ceramic
C8625,C8709	3567A2219R2	CEWX4V-220M,Chip elect.

C8627,C8697,C8698	332181050R1	CK725F1A-105Z1,Chip ceramic
C8699,C8701,C8702	332181050R1	CK725F1A-105Z1,Chip ceramic
C8703,C8705,C8706	332181050R1	CK725F1A-105Z1,Chip ceramic
C8704	356780479R2	CEWX50V-4.7M,Chip elect.
C8707,C8708,C8710	332181050R1	CK725F1A-105Z1,Chip ceramic
C8801,C8803,C8804	332181050R1	CK725F1A-105Z1,Chip ceramic
C8802,C8814,C8816	3567A2219R2	CEWX4V-220M,Chip elect.
C8806	373023924R2	ECHU50V-392J,Chip film
C8807	342108214R1	CC725CH1H-821J1,Chip ceramic
C8809,C8811	332181050R1	CK725F1A-105Z1,Chip ceramic
C8812,C8817	332181050R1	CK725F1A-105Z1,Chip ceramic
C8818	356744709R2	CEWX16V-47M,Chip elect.
C8852,C8906,C8907	356721019R2	CEWX6.3V-100M,Chip elect.
C8853,C8854,C8855	356723319R2	CEWX6.3V-330M,Chip elect.
C8902,C8903	332161040R1	CK725F1E-104Z1,Chip ceramic
C8904,C8905	332161040R1	CK725F1E-104Z1,Chip ceramic
C8906,C8907,C8908	356723319R2	CEWX6.3V-330M,Chip elect.
C8909,C8910	356723319R2	CEWX6.3V-330M,Chip elect.
R8354	332161040R1	CK725F1E-104Z1,Chip ceramic

CIRCUIT NO.	PART NO. Resistors	DESCRIPTION
R8001,R8002,R8003	435032204R1	RN72K1J-220JE,Chip carbon
R8013	435031004R1	RN72K1J-100JE,Chip carbon
R8018,R8019,R8045	435034724R1	RN72K1J-472JE,Chip carbon
R8024,R8025,R8026	435030004R1	RN72K1J-000JE,Chip carbon
R8027,R8029,R8037	435030004R1	RN72K1J-000JE,Chip carbon
R8028,R8305,R8323	435031032R1	RN72K1J-103FE,Chip carbon
R8034,R8035,R8036	435032224R1	RN72K1J-222JE,Chip carbon
R8038,R8053,R8065	435031024R1	RN72K1J-102JE,Chip carbon
R8041,R8103	435031014R1	RN72K1J-101JE,Chip carbon
R8047,R8050,R8051	435034724R1	RN72K1J-472JE,Chip carbon
R8055,R8082,R8374	435031054R1	RN72K1J-105JE,Chip carbon
R8056,R8173,R8174	435030004R1	RN72K1J-000JE,Chip carbon
R8057,R8058,R8066	435034724R1	RN72K1J-472JE,Chip carbon
R8061,R8062,R8064	435032222R1	RN72K1J-222FE,Chip carbon
R8067,R8072,R8114	435031024R1	RN72K1J-102JE,Chip carbon
R8071,R8119,R8325	435034724R1	RN72K1J-472JE,Chip carbon
R8079,R8143,R8901	435031512R1	RN72K1J-151FE,Chip carbon
R8080,R8145	435033912R1	RN72K1J-391FE,Chip carbon
R8081,R8113,R8115	435032722R1	RN72K1J-272FE,Chip carbon
R8088,R8363,R8364	435034702R1	RN72K1J-470FE,Chip carbon
R8089,R8090,R8091	435032222R1	RN72K1J-222FE,Chip carbon
R8101,R8105,R8107	435036804R1	RN72K1J-680JE,Chip carbon
R8109,R8111	435036804R1	RN72K1J-680JE,Chip carbon
R8116,R8117,R8312	435032222R1	RN72K1J-222FE,Chip carbon
R8120	435033334R1	RN72K1J-333JE,Chip carbon
R8121,R8331,R8910	435031824R1	RN72K1J-182JE,Chip carbon
R8124,R8125,R8126	435032204R1	RN72K1J-220JE,Chip carbon
R8128,R8132,R8133	435032204R1	RN72K1J-220JE,Chip carbon
R8135,R8136,R8142	435032204R1	RN72K1J-220JE,Chip carbon
R8144,R8811,R8812	435032722R1	RN72K1J-272FE,Chip carbon
R8151,R8152,R8153	435031044R1	RN72K1J-104JE,Chip carbon
R8155,R8156,R8157	435031044R1	RN72K1J-104JE,Chip carbon
R8165,R8166,R8167	435032204R1	RN72K1J-220JE,Chip carbon
R8168,R8169,R8170	435031024R1	RN72K1J-102JE,Chip carbon
R8171,R8172,R8307	435031024R1	RN72K1J-102JE,Chip carbon
R8175,R8301,R8302	435030004R1	RN72K1J-000JE,Chip carbon
R8187,R8188,R8189	435032204R1	RN72K1J-220JE,Chip carbon
R8190,R8310,R8311	435032204R1	RN72K1J-220JE,Chip carbon
R8303,R8403,R8507	435030004R1	RN72K1J-000JE,Chip carbon
R8304,R8371,R8405	435034712R1	RN72K1J-471FE,Chip carbon
R8306,R8376,R8807	435034704R1	RN72K1J-470JE,Chip carbon
R8308,R8309,R8357	435031044R1	RN72K1J-104JE,Chip carbon
R8313,R8339,R8711	435032222R1	RN72K1J-222FE,Chip carbon
R8314,R8375,R8856	435035612R1	RN72K1J-561FE,Chip carbon
R8319,R8517,R8518	435032204R1	RN72K1J-220JE,Chip carbon
R8322,R8407,8533	435034734R1	RN72K1J-473JE,Chip carbon
R8324,R8351,R8369	435031032R1	RN72K1J-103FE,Chip carbon
R8326,R8401,R8404	435034724R1	RN72K1J-472JE,Chip carbon
R8327,R8333,R8342	435031024R1	RN72K1J-102JE,Chip carbon
R8328,R8329,R8332	435033324R1	RN72K1J-332JE,Chip carbon
R8334,R8335	435032022R1	RN72K1J-202FE,Chip carbon
R8337,R8338	435034722R1	RN72K1J-472FE,Chip carbon
R8340	435031502R1	RN72K1J-150FE,Chip carbon
R8341	433421004R1	RN72K2E-100JD,Chip carbon
R8352,R8356,R8367	435031024R1	RN72K1J-102JE,Chip carbon

R8355	435033022R1	RN72K1J-302FE,Chip carbon
R8358,R8359	435031044R1	RN72K1J-104JE,Chip carbon
R8360,R8361	435031044R1	RN72K1J-104JE,Chip carbon
R8365	435034702R1	RN72K1J-470FE,Chip carbon
R8373,R8706,R8707	435031032R1	RN72K1J-103FE,Chip carbon
R8378,R8379,R8816	435031034R1	RN72K1J-103JE,Chip carbon
R8406	435035112R1	RN72K1J-511FE,Chip carbon
R8502,R8504,R8506	435034724R1	RN72K1J-472JE,Chip carbon
R8503,R8603,R8913	435034712R1	RN72K1J-471FE,Chip carbon
R8509,R8532,R8539	435034724R1	RN72K1J-472JE,Chip carbon
R8510,R8537,R8538	435031024R1	RN72K1J-102JE,Chip carbon
R8519,R8520,R8521	435032204R1	RN72K1J-220JE,Chip carbon
R8522,R8523,R8617	435032204R1	RN72K1J-220JE,Chip carbon
R8530,R8630	435033914R1	RN72K1J-391JE,Chip carbon
R8541,R8607,R8641	435030004R1	RN72K1J-000JE,Chip carbon
R8602,R8604,R8606	435034724R1	RN72K1J-472JE,Chip carbon
R8609,R8632,R8639	435034724R1	RN72K1J-472JE,Chip carbon
R8610,R8637,R8638	435031024R1	RN72K1J-102JE,Chip carbon
R8618,R8619,R8620	435032204R1	RN72K1J-220JE,Chip carbon
R8621,R8622,R8623	435032204R1	RN72K1J-220JE,Chip carbon
R8633,R8738	435034734R1	RN72K1J-473JE,Chip carbon
R8701	435034724R1	RN72K1J-472JE,Chip carbon
R8705,R8857,R8858	435031024R1	RN72K1J-102JE,Chip carbon
R8708,R8717,R8718	435030004R1	RN72K1J-000JE,Chip carbon
R8709,R8713,R8714	435032204R1	RN72K1J-220JE,Chip carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R8710,R8815	435031032R1	RN72K1J-103FE,Chip carbon
R8712,R8803,R8804	435032222R1	RN72K1J-222FE,Chip carbon
R8715,R8716,R8719	435032204R1	RN72K1J-220JE,Chip carbon
R8720,R8721,R8740	435032204R1	RN72K1J-220JE,Chip carbon
R8722,R8723,R8859	435032224R1	RN72K1J-222JE,Chip carbon
R8741,R8742,R8743	435032204R1	RN72K1J-220JE,Chip carbon
R8744,R8746,R8799	435030004R1	RN72K1J-000JE,Chip carbon
R8745,R8747,R8748	435032204R1	RN72K1J-220JE,Chip carbon
R8749,R8750,R8751	435032204R1	RN72K1J-220JE,Chip carbon
R8752,R8753,R8754	435032204R1	RN72K1J-220JE,Chip carbon
R8755,R8805,R8806	435032204R1	RN72K1J-220JE,Chip carbon
R8802,R8820,R8907	435030004R1	RN72K1J-000JE,Chip carbon
R8808,R8809,R8810	435036812R1	RN72K1J-681FE,Chip carbon
R8813,R8814	435036812R1	RN72K1J-681FE,Chip carbon
R8817,R8819,R8829	435032204R1	RN72K1J-220JE,Chip carbon
R8818,R8919,R8920	435031034R1	RN72K1J-103JE,Chip carbon
R8830	435032204R1	RN72K1J-220JE,Chip carbon
R8851,R8852,R8853	435031514R1	RN72K1J-151JE,Chip carbon
R8854,R8855	435031524R1	RN72K1J-152JE,Chip carbon
R8902,R8903	435031512R1	RN72K1J-151FE,Chip carbon
R8908,R8909,R8916	435030004R1	RN72K1J-000JE,Chip carbon
R8911,R8912	435031824R1	RN72K1J-182JE,Chip carbon
R8914,R8915,R8922	435034712R1	RN72K1J-471FE,Chip carbon
R8917,R8918	435030004R1	RN72K1J-000JE,Chip carbon
R8921	435031034R1	RN72K1J-103JE,Chip carbon
R8923,R8924,R8929	435034712R1	RN72K1J-471FE,Chip carbon
R8925,R8927,8928	435035624R1	RN72K1J-562JE,Chip carbon
R8930,R8931	435034712R1	RN72K1J-471FE,Chip carbon
R8932,R8933,R8934	435031024R1	RN72K1J-102JE,Chip carbon
	Terminals	
P8302,P8501,P8601	25052956R3	DC1R019JDA,HDMI
E8000,E8001	25065425	Ground
	Plugs	
P8000,P8001	25056324R2	IMSA-9850B-20Y902
P8702	25055704	NPLG-8P660
	Tape	
A001	29110083	16mm, Cloth

PRE-AMPLIFIER PC BOARD (NAAR-8139-1A)**CONNECTOR PC BOARD(NAETC-8140-1A)****COAXIAL INPUT TERMINAL PC BOARD(NADG-8141-1A)****CONNECTOR PC BOARD(NAETC-8142-1A)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q4000,Q4001,Q4002	22240489R1NE	MPC4570G2-T1(MST)
Q4003,Q4004,Q4005	22240489R1NE	MPC4570G2-T1(MST)
Q4006,Q4007,Q4008	22240489R1NE	MPC4570G2-T1(MST)
Q4009,Q4010,Q4011	22240489R1NE	MPC4570G2-T1(MST)
Q4012,Q4013,Q4014	22240489R1NE	MPC4570G2-T1(MST)
Q4015,Q4016,Q4017	22240489R1NE	MPC4570G2-T1(MST)
Q4018,Q4019	22240489R1NE	MPC4570G2-T1(MST)
Q4020,Q4022,Q4023	22242068R2	WM8719EDS
Q4025,Q4027	22242068R2	WM8719EDS

Q4030,Q4032,Q4033	22240489R1NE	MPC4570G2-T1(MST)
Q4035,Q4050,Q4051	22240489R1NE	MPC4570G2-T1(MST)
Q4040,Q4041,Q4042	22242107R2	WM8816
Q4043,Q4044,Q4045	22242107R2	WM8816
Q4046,Q4047	22242107R2	WM8816
Q4052,Q4053,Q4054	22240489R1NE	MPC4570G2-T1(MST)
Q4055,Q4056,Q4057	22240489R1NE	MPC4570G2-T1(MST)
Q4080,Q4081	22241383R2	NJM4565M-D
Q4120,Q4121,Q4130	22240489R1NE	MPC4570G2-T1(MST)
Q4860	22240928R2	TC9246F
Q4861	222780053R2JR	78L05(NJM78L05UA)
Q4863	22241895R2	TC7SZ125FU
Q4869,Q4870,Q4871	22242101R2	TC9164BFG
Q4876	222780155JRC or	78M15HF(NJM78M15FA) or
Q4876	222780155NEC	78M15HF(MPC78M15HF)
Q4877	222790155JRC or	79M15HF(NJM79M15FA) or
Q4877	222790155NEC	79M15HF(MPC79M15HF)
Q4878	222780053R2JR	78L05(NJM78L05UA)
Q7451	222740046R2	74HCU04F
Q7452	22274126GR2	TC74VHCT126AFT
Q7453,Q7454,Q7455	222741515R2TO	TC74HC151F
Q7456	22242090R2	BU2152FS
	Transistors	
Q4060,Q4061,Q4062	2215410R2	RN1441
Q4063,Q4064,Q4065	2215410R2	RN1441
Q4066,Q4067,Q4070	2215410R2	RN1441
Q4071,Q4072,Q4073	2215410R2	RN1441
CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistors	
Q4074,Q4075,Q4076	2215410R2	RN1441
Q4077,Q4090,Q4091	2215410R2	RN1441
Q4100,Q4101	2215410R2	RN1441
Q4110,Q4111	2215410R2	RN1441
Q4140,Q4867,Q4872	2213145R2 or	2SC2712-GR or
Q4874,Q4879,Q4880	2216175R2	KTC3875-GR
Q4868,Q4873,Q4875	2214530R2 or	RN2402 or
	2216220R2	KRA102S
Q4881,Q4883,Q4884	2213145R2 or	2SC2712-GR or
Q4885,Q4886,Q4887	2216175R2	KTC3875-GR
	Diodes	
D4860,D4861,D4862	223234R2 or	1SS352 or
D4863,D4865,D4866	223269R2	1SS355,Chip
D4867,D4868,D4869	223234R2 or	1SS352 or
	223269R2	1SS355,Chip
	Coils	
L4000,L4002,L4003	231237M022R2 or	NCH-1471 or
L4005,L4007,L4010	233533M022R2	NCH-1587-022M,Choke
L4015,L4017	231237M022R2	NCH-1471,Choke
L4864,L7451,L7452	233533M022R2	NCH-1587-022M,Choke
L4861,L4862	231237K470R2 or	NCH-1479 or
	233533K470R2	NCH-1587-470K,Choke
L4863	230958R1	BK1608LM182-T,EMI
R7451,R7453,R7455	230958R1	BK1608LM182-T,EMI
R7457,R7459,R7461	230958R1	BK1608LM182-T,EMI
T7451,T7452	232136	NSRF-2046,Multiplex
	Capacitors	
C4000,C4001,C4002	373026814R2	ECHU50V-681J,Chip film
C4003,C4004,C4005	373026814R2	ECHU50V-681J,Chip film
C4006,C4007,C4008	373026814R2	ECHU50V-681J,Chip film
C4009,C4010,C4011	373026814R2	ECHU50V-681J,Chip film
C4012,C4013,C4014	373026814R2	ECHU50V-681J,Chip film
C4015,C4016,C4017	373026814R2	ECHU50V-681J,Chip film
C4018,C4019	373026814R2	ECHU50V-681J,Chip film
C4020,C4021,C4022	373022214R2	ECHU50V-221J,Chip film
C4023,C4024,C4025	373022214R2	ECHU50V-221J,Chip film
C4026,C4027,C4028	373022214R2	ECHU50V-221J,Chip film
C4029,C4030,C4031	373022214R2	ECHU50V-221J,Chip film
C4032,C4033,C4034	373022214R2	ECHU50V-221J,Chip film
C4035,C4036,C4037	373022214R2	ECHU50V-221J,Chip film
C4038,C4039	373022214R2	ECHU50V-221J,Chip film
C4040,C4042,C4043	332161040R1	CK725F1E-104Z1,Chip ceramic
C4045,C4047,C4060	332161040R1	CK725F1E-104Z1,Chip ceramic
C4050,C4052,C4053	393344707 or	CE04W16V-47M(VX) or
C4055,C4057,C4070	394644707	CE04W16V-47M(VR),Elect.
C4062,C4063,C4065	332161040R1	CK725F1E-104Z1,Chip ceramic
C4067,C4170,C4172	332161040R1	CK725F1E-104Z1,Chip ceramic
C4072,C4073,C4075	393344707 or	CE04W16V-47M(VX) or
C4077,C4380,C4382	394644707	CE04W16V-47M(VR),Elect.
C4090,C4091,C4092	373021224R2	ECHU50V-122J,Chip film
C4093,C4094,C4095	373021224R2	ECHU50V-122J,Chip film

C4096,C4097,C4098 C4099	373021224R2 373021224R2	ECHU50V-122J,Chip film ECHU50V-122J,Chip film
C4100,C4101,C4102	373024714R2	ECHU50V-471J,Chip film
C4103,C4104,C4105	373024714R2	ECHU50V-471J,Chip film
C4106,C4107,C4108	373024714R2	ECHU50V-471J,Chip film
C4109	373024714R2	ECHU50V-471J,Chip film
C4150,C4151,C4152	395852207	CE04W25V-22M(ROB),Elect.
C4153,C4154,C4158	395952207	CE04W25V-22M(RFS),Elect.
C4155,C4156,C4157	395852207	CE04W25V-22M(ROB),Elect.
C4159,C4253,C4254	395952207	CE04W25V-22M(RFS),Elect.
C4160,C4162,C4163	393341007 or	CE04W16V-10M(VX) or
C4165,C4167,C4200	394641007	CE04W16V-10M(VR),Elect.
C4173,C4175,C4177	332161040R1	CK725F1E-104Z1,Chip ceramic
C4190,C4192,C4193	332161040R1	CK725F1E-104Z1,Chip ceramic
C4195,C4197,C4210	332161040R1	CK725F1E-104Z1,Chip ceramic
C4202,C4203,C4205	393341007 or	CE04W16V-10M(VX) or
C4207,C4220,C4222	394641007	CE04W16V-10M(VR),Elect.
C4212,C4213,C4215	332161040R1	CK725F1E-104Z1,Chip ceramic
C4217,C4550,C4551	332161040R1	CK725F1E-104Z1,Chip ceramic
C4223,C4225,C4227	393341007 or	CE04W16V-10M(VX) or
	394641007	CE04W16V-10M(VR),Elect.
C4230,C4232,C4233	374721044	ECQ-V50V-104J,Plastic film
C4235,C4237	374721044	ECQ-V50V-104J,Plastic film
C4250,C4251,C4252	395852207	CE04W25V-22M(ROB),Elect.
C4255,C4256,C4400	395852207	CE04W25V-22M(ROB),Elect.
C4257,C4403,C4404	395952207	CE04W25V-22M(RFS),Elect.
C4260,C4261,C4262	395941007	CE04W16V-10M(RFS),Elect.
C4263,C4264,C4265	395941007	CE04W16V-10M(RFS),Elect.
C4266,C4267,C4300	395941007	CE04W16V-10M(RFS),Elect.
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C4270,C4271,C4272	342101014R1	CC725CH1H-101J1,Chip ceramic
C4273,C4274,C4275	342101014R1	CC725CH1H-101J1,Chip ceramic
C4276,C4277,C4460	342101014R1	CC725CH1H-101J1,Chip ceramic
C4280,C4281,C4282	393341007 or	CE04W16V-10M(VX) or
C4283,C4284,C4285	394641007	CE04W16V-10M(VR),Elect.
C4286,C4287	393341007 or	CE04W16V-10M(VX) or
	394641007	CE04W16V-10M(VR),Elect.
C4290,C4291,C4292	374722244	ECQ-V50V-224J,Plastic film
C4293,C4294,4295	374722244	ECQ-V50V-224J,Plastic film
C4296,C4297,C4420	374722244	ECQ-V50V-224J,Plastic film
C4301,C4302,C4303	395941007	CE04W16V-10M(RFS),Elect.
C4304,C4305,C4306	395941007	CE04W16V-10M(RFS),Elect.
C4307,C4370,C4371	395941007	CE04W16V-10M(RFS),Elect.
C4350,C4351,C4352	3600028R2	UC122A0100F-T,Mica
C4353,C4354,C4355	3600028R2	UC122A0100F-T,Mica
C4356,C4357,C4360	3600028R2	UC122A0100F-T,Mica
C4361,C4362,C4363	3600028R2	UC122A0100F-T,Mica
C4364,C4365	3600028R2	UC122A0100F-T,Mica
C4366,C4367	3600028R2	UC122A0100F-T,Mica
C4372,C4373,C4374	395941007	CE04W16V-10M(RFS),Elect.
C4375,C4376,C4377	395941007	CE04W16V-10M(RFS),Elect.
C4383,C4385,C4390	393344707 or	CE04W16V-47M(VX) or
C4392,C4393,C4395	394644707	CE04W16V-47M(VR),Elect.
C4401,C4402,C4405	395852207	CE04W25V-22M(ROB),Elect.
C4406,C4510,C4511	395852207	CE04W25V-22M(ROB),Elect.
C4407	395952207	CE04W25V-22M(RFS),Elect.
C4410,C4411,C4412	373021024R2	ECHU50V-102J,Chip film
C4413,C4414,C4415	373021024R2	ECHU50V-102J,Chip film
C4416,C4417	373021024R2	ECHU50V-102J,Chip film
C4421,C4422,C4423	374722244	ECQ-V50V-224J,Plastic film
C4424,C4425	374722244	ECQ-V50V-224J,Plastic film
C4426,C4427	374722244	ECQ-V50V-224J,Plastic film
C4430,C4431	393341007	CE04W16V-10M(VX),Elect.
C4440,C4441	393342217 or	CE04W16V-220M(VX) or
	394642217	CE04W16V-220M(VR),Elect.
C4450,C4451	393380227	CE04W50V-2.2M(VX),Elect.
C4461,C7451,C7452	342101014R1	CC725CH1H-101J1,Chip ceramic
C4470,C4471	393321017	CE04W6.3V-100M(VX),Elect.
C4480,C4481	373022224R2	ECHU50V-222J,Chip film
C4490,C4491,C4492	342103304R1	CC725CH1H-330J1,Chip ceramic
C4493,C4494,C4495	342103304R1	CC725CH1H-330J1,Chip ceramic
C4496,C4497,C4500	342103304R1	CC725CH1H-330J1,Chip ceramic
C4501,C4502,C4503	342103304R1	CC725CH1H-330J1,Chip ceramic
C4504,C4505,C4506	342103304R1	CC725CH1H-330J1,Chip ceramic
C4507	342103304R1	CC725CH1H-330J1,Chip ceramic
C4520,C4521,C4540	395924707	CE04W6.3V-47M(RFS),Elect.
C4530,C4531,C4580	395852207	CE04W25V-22M(ROB),Elect.
C4541	395924707	CE04W6.3V-47M(RFS),Elect.
C4560,C4561,C4910	3600029R2	UC122A0330J-T,Mica

C4570,C4571	395941007	CE04W16V-10M(RFS),Elect.
C4581,C4590,C4591	395852207	CE04W25V-22M(ROB),Elect.
C4640,C4641,C4642	395852207	CE04W25V-22M(ROB),Elect.
C4645,C4646,C4647	395852207	CE04W25V-22M(ROB),Elect.
C4650,C4651,C4652	395852207	CE04W25V-22M(ROB),Elect.
C4655,C4656,C4660	395852207	CE04W25V-22M(ROB),Elect.
C4661,C4662,C4665	395852207	CE04W25V-22M(ROB),Elect.
C4666,C4670,C4671	395852207	CE04W25V-22M(ROB),Elect.
C4680,C4681	395852207	CE04W25V-22M(ROB),Elect.
C4860,C4861,C4863	332161040R1	CK725F1E-104Z1,Chip ceramic
C4862,C4864,C4868	393324707 or 394624707	CE04W6.3V-47M(VX) or CE04W6.3V-47M(VR),Elect.
C4865	342104704R1	CC725CH1H-470J1,Chip ceramic
C4866	342111024R1	CC725CH1E-102J1,Chip ceramic
C4867	337394745R1	CK732B1C-474K ,Chip ceramic
C4870,C4884,C4885	332161040R1	CK725F1E-104Z1,Chip ceramic
C4882,C4896,C4897	393380227 or 394680227	CE04W50V-2.2M(VX) or CE04W50V-2.2M(VR),Elect.
C4883,C4887,C4892	393364707 or 394664707	CE04W35V-47M(VX) or CE04W35V-47M(VR),Elect.
C4886,C4890,C4895	342103314R1	CC725CH1H-331J1,Chip ceramic
C4888,C4889,C4891	332161040R1	CK725F1E-104Z1,Chip ceramic
C4893,C4894,C4898	332161040R1	CK725F1E-104Z1,Chip ceramic
C4899,C4905,C4906	332161040R1	CK725F1E-104Z1,Chip ceramic
C4900,C4901	394641007 or 393341007	CE04W16V-10M(VR) or CE04W16V-10M(VX),Elect.
C4902,C4903	393342217 or 394642217	CE04W16V-220M(VX) or CE04W16V-220M(VR),Elect.
C4904,C4920,C4921	393344707 or 394644707	CE04W16V-47M(VX) or CE04W16V-47M(VR),Elect.
C4911	3600030R2	UC122A0330J-T,Mica
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C4922,C4981,C4982	332161040R1	CK725F1E-104Z1,Chip ceramic
C4983,C4984,C4985	332161040R1	CK725F1E-104Z1,Chip ceramic
C4986,C4987,C4988	332161040R1	CK725F1E-104Z1,Chip ceramic
C4989,C7459,C7460	332161040R1	CK725F1E-104Z1,Chip ceramic
C7453,C7455,C7456	342101014R1	CC725CH1H-101J1,Chip ceramic
C7457	342101014R1	CC725CH1H-101J1,Chip ceramic
C7458	342101024R1	CC725CH1H-102J1,Chip ceramic
C7461,C7462,C7463	332161040R1	CK725F1E-104Z1,Chip ceramic
C7464,C7468,C7469	332161040R1	CK725F1E-104Z1,Chip ceramic
C7465,C7466,C7467	342100802R1	CC725CH1H-080D1,Chip ceramic
C7470,C7477	354744709	CE04W16V-47M,Elect.
C7471,C7472,C7473	342100802R1	CC725CH1H-080D1,Chip ceramic
C7474,C7475,C7476	332161040R1	CK725F1E-104Z1,Chip ceramic
C7478,C7481,C7482	332161040R1	CK725F1E-104Z1,Chip ceramic
	Resistors	
L3594,L3595,L3596	435030004R1	RN72K1J-000JE,Chip carbon
L4860	435023314R1	RN72W1J-331JE,Chip carbon
R10,R11,R12,R13	435030004R1	RN72K1J-000JE,Chip carbon
R14,R15,R16,R17	435030004R1	RN72K1J-000JE,Chip carbon
R20,R21,R22,R23	435030004R1	RN72K1J-000JE,Chip carbon
R24,R25,R26,R27	435030004R1	RN72K1J-000JE,Chip carbon
R40,R41,R42,R43	435030004R1	RN72K1J-000JE,Chip carbon
R4000,R4001,R4002	435022724R1	RN72W1J-272JE,Chip carbon
R4003,R4004,R4005	435022724R1	RN72W1J-272JE,Chip carbon
R4006,R4007,R4008	435022724R1	RN72W1J-272JE,Chip carbon
R4009,R4010,R4011	435022724R1	RN72W1J-272JE,Chip carbon
R4012,R4013,R4014	435022724R1	RN72W1J-272JE,Chip carbon
R4015,R4016,R4017	435022724R1	RN72W1J-272JE,Chip carbon
R4018,R4019,R4030	435022724R1	RN72W1J-272JE,Chip carbon
R4020,R4021,R4022	435025624R1	RN72W1J-562JE,Chip carbon
R4023,R4024,R4025	435025624R1	RN72W1J-562JE,Chip carbon
R4026,R4027,R4028	435025624R1	RN72W1J-562JE,Chip carbon
R4029,R4250,R4251	435025624R1	RN72W1J-562JE,Chip carbon
R4031,R4032,R4033	435022724R1	RN72W1J-272JE,Chip carbon
R4034,R4035,R4036	435022724R1	RN72W1J-272JE,Chip carbon
R4037,R4038,R4039	435022724R1	RN72W1J-272JE,Chip carbon
R4040,R4041,R4042	435022724R1	RN72W1J-272JE,Chip carbon
R4043,R4044,R4045	435022724R1	RN72W1J-272JE,Chip carbon
R4046,R4047	435022724R1	RN72W1J-272JE,Chip carbon
R4048,R4049	435022724R1	RN72W1J-272JE,Chip carbon
R4050,R4052,R4053	435022204R1	RN72W1J-220JE,Chip carbon
R4055,R4057,R4060	435022204R1	RN72W1J-220JE,Chip carbon
R4062,R4063,R4065	435022204R1	RN72W1J-220JE,Chip carbon
R4067,R4070,R4072	435022204R1	RN72W1J-220JE,Chip carbon
R4073,R4075,R4077	435022204R1	RN72W1J-220JE,Chip carbon
R4080,R4082,R4083	435022204R1	RN72W1J-220JE,Chip carbon
R4085,R4087	435022204R1	RN72W1J-220JE,Chip carbon

R4090,R4091,R4092	435028224R1	RN72W1J-822JE,Chip carbon
R4093,R4094,R4095	435028224R1	RN72W1J-822JE,Chip carbon
R4096,R4097	435028224R1	RN72W1J-822JE,Chip carbon
R4098,R4099	435028224R1	RN72W1J-822JE,Chip carbon
R4100,R4101,R4102	435021824R1	RN72W1J-182JE,Chip carbon
R4103,R4104,R4105	435021824R1	RN72W1J-182JE,Chip carbon
R4106,R4107,R4108	435021824R1	RN72W1J-182JE,Chip carbon
R4109	435021824R1	RN72W1J-182JE,Chip carbon
R4110,R4111,R4112	435021034R1	RN72W1J-103JE,Chip carbon
R4113,R4114,R4115	435021034R1	RN72W1J-103JE,Chip carbon
R4116,R4117,R4118	435021034R1	RN72W1J-103JE,Chip carbon
R4119,R4530,R4531	435021034R1	RN72W1J-103JE,Chip carbon
R4120,R4121,R4122	435021524R1	RN72W1J-152JE,Chip carbon
R4123,R4124,R4125	435021524R1	RN72W1J-152JE,Chip carbon
R4126,R4127,R4128	435021524R1	RN72W1J-152JE,Chip carbon
R4129,R4170,R4171	435021524R1	RN72W1J-152JE,Chip carbon
R4130,R4131,R4132	435022234R1	RN72W1J-223JE,Chip carbon
R4133,R4134,R4135	435022234R1	RN72W1J-223JE,Chip carbon
R4136,R4137,R4138	435022234R1	RN72W1J-223JE,Chip carbon
R4139,R4140,R4141	435022234R1	RN72W1J-223JE,Chip carbon
R4142,R4143,R4144	435022234R1	RN72W1J-223JE,Chip carbon
R4145,R4146,R4147	435022234R1	RN72W1J-223JE,Chip carbon
R4148,R4149,R4150	435022234R1	RN72W1J-223JE,Chip carbon
R4151,R4152,R4153	435022234R1	RN72W1J-223JE,Chip carbon
R4154,R5155,R4156	435022234R1	RN72W1J-223JE,Chip carbon
R4157,R4158,R4159	435022234R1	RN72W1J-223JE,Chip carbon
R4160,R4161,R4162	435022234R1	RN72W1J-223JE,Chip carbon
R4163,R4164,R4165	435022234R1	RN72W1J-223JE,Chip carbon
R4166,R4167,R4168	435022234R1	RN72W1J-223JE,Chip carbon
R4169,R4490,R4491	435022234R1	RN72W1J-223JE,Chip carbon
R4172,R4173,R4174	435021524R1	RN72W1J-152JE,Chip carbon
R4175,R4176,R4177	435021524R1	RN72W1J-152JE,Chip carbon
R4178,R4179,R4180	435021524R1	RN72W1J-152JE,Chip carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R4181,R4182,R4183	435021524R1	RN72W1J-152JE,Chip carbon
R4184,R4185,R4186	435021524R1	RN72W1J-152JE,Chip carbon
R4187,R4188,R4189	435021524R1	RN72W1J-152JE,Chip carbon
R4230,R4231,R4232	435021024R1	RN72W1J-102JE,Chip carbon
R4233,R4234,R4235	435021024R1	RN72W1J-102JE,Chip carbon
R4236,R4237,R4238	435021024R1	RN72W1J-102JE,Chip carbon
R4239,R4260,R4261	435021024R1	RN72W1J-102JE,Chip carbon
R4240,R4241,R4242	435025634R1	RN72W1J-563JE,Chip carbon
R4243,R4244,R4245	435025634R1	RN72W1J-563JE,Chip carbon
R4246,R4247,R4248	435025634R1	RN72W1J-563JE,Chip carbon
R4249,R4610,R4611	435025634R1	RN72W1J-563JE,Chip carbon
R4252,R4253,R4254	435025624R1	RN72W1J-562JE,Chip carbon
R4255,R4256,R4257	435025624R1	RN72W1J-562JE,Chip carbon
R4258,R4259,R4896	435025624R1	RN72W1J-562JE,Chip carbon
R4262,R4263,R4264	435021024R1	RN72W1J-102JE,Chip carbon
R4265,R4266,R4267	435021024R1	RN72W1J-102JE,Chip carbon
R4268,R4269,R4925	435021024R1	RN72W1J-102JE,Chip carbon
R4270,R4271,R4272	435024704R1	RN72W1J-470JE,Chip carbon
R4273,R4274,R4278	435024704R1	RN72W1J-470JE,Chip carbon
R4280,R4282,R4283	435024704R1	RN72W1J-470JE,Chip carbon
R4290,R4292,R4293	435023314R1	RN72W1J-331JE,Chip carbon
R4295,R4297,R4300	435023314R1	RN72W1J-331JE,Chip carbon
R4302,R4303,R4305	435023314R1	RN72W1J-331JE,Chip carbon
R4307,R4310,R4312	435023314R1	RN72W1J-331JE,Chip carbon
R4313,R4315,R4317	435023314R1	RN72W1J-331JE,Chip carbon
R4320,R4322,R4323	435023314R1	RN72W1J-331JE,Chip carbon
R4325,R4327,R4330	435023314R1	RN72W1J-331JE,Chip carbon
R4332,R4333,R4335	435023314R1	RN72W1J-331JE,Chip carbon
R4337,R4340,R4342	435023314R1	RN72W1J-331JE,Chip carbon
R4343,R4345,R4347	435023314R1	RN72W1J-331JE,Chip carbon
R4350,R4352,R4353	435023314R1	RN72W1J-331JE,Chip carbon
R4355,R4357,R4894	435023314R1	RN72W1J-331JE,Chip carbon
R4360,R4361,R4362	435022244R1	RN72W1J-224JE,Chip carbon
R4363,R4364,R4365	435022244R1	RN72W1J-224JE,Chip carbon
R4366,R4367,R4370	435022244R1	RN72W1J-224JE,Chip carbon
R4371,R4372,R4373	435022244R1	RN72W1J-224JE,Chip carbon
R4374,R4375,R4376	435022244R1	RN72W1J-224JE,Chip carbon
R4377,R4400,R4401	435022244R1	RN72W1J-224JE,Chip carbon
R4380,R4381,R4382	435021054R1	RN72W1J-105JE,Chip carbon
R4383,R4384,R4385	435021054R1	RN72W1J-105JE,Chip carbon
R4386,R4387,R4390	435021054R1	RN72W1J-105JE,Chip carbon
R4391,R4392,R4393	435021054R1	RN72W1J-105JE,Chip carbon
R4394,R4395,R4396	435021054R1	RN72W1J-105JE,Chip carbon
R4397	435021054R1	RN72W1J-105JE,Chip carbon
R44,R45,R46,R47	435030004R1	RN72K1J-000JE,Chip carbon

R4402,R4403,R4404	435022244R1	RN72W1J-224JE,Chip carbon
R4405,R4406,R4407	435022244R1	RN72W1J-224JE,Chip carbon
R4410,R4411,R4412	435024744R1	RN72W1J-474JE,Chip carbon
R4413,R4414,R4415	435024744R1	RN72W1J-474JE,Chip carbon
R4416,R4417,R4420	435024744R1	RN72W1J-474JE,Chip carbon
R4421	435022244R1	RN72W1J-224JE,Chip carbon
R4422,R4423,R4424	435022244R1	RN72W1J-224JE,Chip carbon
R4425,R4426,R4427	435022244R1	RN72W1J-224JE,Chip carbon
R4430,R4431,R4432	435022714R1	RN72W1J-271JE,Chip carbon
R4433,R4434,R4435	435022714R1	RN72W1J-271JE,Chip carbon
R4436,R4437	435022714R1	RN72W1J-271JE,Chip carbon
R4440,R4441,R4442	435021014R1	RN72W1J-101JE,Chip carbon
R4443,R4444,R4445	435021014R1	RN72W1J-101JE,Chip carbon
R4446,R4447,R4897	435021014R1	RN72W1J-101JE,Chip carbon
R4450,R4451,R4452	435024704R1	RN72W1J-470JE,Chip carbon
R4453,R4454,R4455	435024704R1	RN72W1J-470JE,Chip carbon
R4456,R4457,R4470	435024704R1	RN72W1J-470JE,Chip carbon
R4460,R4461,R4462	435022244R1	RN72W1J-224JE,Chip carbon
R4463,R4464,R4465	435022244R1	RN72W1J-224JE,Chip carbon
R4466,R4467,R4485	435022244R1	RN72W1J-224JE,Chip carbon
R4471,R4472,R4473	435024704R1	RN72W1J-470JE,Chip carbon
R4474,R4475,R4476	435024704R1	RN72W1J-470JE,Chip carbon
R4477,R4860,R4861	435024704R1	RN72W1J-470JE,Chip carbon
R4480,R4481	443522204	RS1/2WBJ-22,Metal oxide
R4486,R4510,R4511	435022244R1	RN72W1J-224JE,Chip carbon
R4500,R4501	435022234R1	RN72W1J-223JE,Chip carbon
R4520,R4521,R4680	435022224R1	RN72W1J-222JE,Chip carbon
R4540,R4541,R4580	435021034R1	RN72W1J-103JE,Chip carbon
R4550,R4551,R4560	435023304R1	RN72W1J-330JE,Chip carbon
R4561,R4570,R4571	435023304R1	RN72W1J-330JE,Chip carbon
R4581,R4590,R4591	435021034R1	RN72W1J-103JE,Chip carbon
R4600,R4601,R4750	435022244R1	RN72W1J-224JE,Chip carbon
R4620,R4621,R4630	435025634R1	RN72W1J-563JE,Chip carbon
R4631,R4740,R4741	435025634R1	RN72W1J-563JE,Chip carbon
R4640,R4641,R4661	435021214R1	RN72W1J-121JE,Chip carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R4650,R4651	435028214R1	RN72W1J-821JE,Chip carbon
R4660	435021814R1	RN72W1J-181JE,Chip carbon
R4670,R4671	435021524R1	RN72W1J-152JE,Chip carbon
R4681,R4700,R4701	435022224R1	RN72W1J-222JE,Chip carbon
R4690,R4691	435021234R1	RN72W1J-123JE,Chip carbon
R4710,R4711	435021234R1	RN72W1J-123JE,Chip carbon
R4720,R4721,R4730	435021034R1	RN72W1J-103JE,Chip carbon
R4731,R7463,R7464	435021034R1	RN72W1J-103JE,Chip carbon
R4751	435022244R1	RN72W1J-224JE,Chip carbon
R4862,R4863,R4864	435024704R1	RN72W1J-470JE,Chip carbon
R4865,R4866,R4867	435024704R1	RN72W1J-470JE,Chip carbon
R4868,R4869,R4870	435024704R1	RN72W1J-470JE,Chip carbon
R4871,R4872,R4873	435024704R1	RN72W1J-470JE,Chip carbon
R4874,R4875,R4876	435024704R1	RN72W1J-470JE,Chip carbon
R4877,R4878,R4879	435024704R1	RN72W1J-470JE,Chip carbon
R4880,R4881,R4882	435024704R1	RN72W1J-470JE,Chip carbon
R4883,R4884,R4887	435024704R1	RN72W1J-470JE,Chip carbon
R4886,R4891,R4943	435030004R1	RN72K1J-000JE,Chip carbon
R4888,R4889,R4900	435024704R1	RN72W1J-470JE,Chip carbon
R4890	435022214R1	RN72W1J-221JE,Chip carbon
R4895	435025614R1	RN72W1J-561JE,Chip carbon
R4914,R4915,R4916	435021014R1	RN72W1J-101JE,Chip carbon
R4917,R4918,R4919	435021014R1	RN72W1J-101JE,Chip carbon
R4920,R4921,R4923	435021014R1	RN72W1J-101JE,Chip carbon
R4924,R4926,R4927	435021014R1	RN72W1J-101JE,Chip carbon
R4928,R4929,R4930	435021024R1	RN72W1J-102JE,Chip carbon
R4931,R4932,R4940	435021024R1	RN72W1J-102JE,Chip carbon
R4933,R4934,R4935	435022244R1	RN72W1J-224JE,Chip carbon
R4936,R4937	443621004	RS1WBJ-10,Metal oxide
R4938,R4939	453530224	RNU1/2WCJ-2.2,Metal
R4941,R4942,R4949	435021024R1	RN72W1J-102JE,Chip carbon
R4944,R4945,R4946	435030004R1	RN72K1J-000JE,Chip carbon
R4947,R4948,R4953	435030004R1	RN72K1J-000JE,Chip carbon
R4950,R4951,R4952	435021024R1	RN72W1J-102JE,Chip carbon
R4954,R4955,R7472	435021024R1	RN72W1J-102JE,Chip carbon
R7452,R7454,R7456	435037504R1	RN72K1J-750JE,Chip carbon
R7458,R7460,R7462	435037504R1	RN72K1J-750JE,Chip carbon
R7465,R7466,R7467	435021034R1	RN72W1J-103JE,Chip carbon
R7468	435021034R1	RN72W1J-103JE,Chip carbon
R7469,R7470,R7471	435024704R1	RN72W1J-470JE,Chip carbon
R7473,R7474,R7475	435023314R1	RN72W1J-331JE,Chip carbon
	Relays	
RL4860,RL4861,RL4862	25065659	NRL-2P2A-DC24-174

RL4863,RL4864,RL4865	25065659	NRL-2P2A-DC24-174
RL4866,RL4867,RL4868	25065659	NRL-2P2A-DC24-174
	Terminals	
P4868	25045797	NPJ-9PDWRGLEPNT577
P7451,P7452	25045624	NPJ-3PDO431
P7453	25045758	NPJ-2PDO543
	Sockets	
P3501B	25052979R2	IMSA-9850S-30Y903
P5000	2009990869UL	NSAS-30P1316
P7454B	25052810R2	IMSA-9850S-14Y900
P7501B	25052586R2	NSCT-20P2483
	Plugs	
P3105A	25056360R2	MINI-CT-40P(4-353315-0)
P3106A	25056359R2	MINI-CT-38P(3-353315-8)
P3501C	25056209R2	IMSA-9850B-28Y900
P4864A	25055157	NPLG-13P141
P7002A,P7454A	25056202R2	IMSA-9850B-14Y900
P7501C	25056205R2	IMSA-9850B-20Y900
P7506	25055135	NPLG-5P119

SLOT F TERMINAL PC BOARD (NAAF-8144-1)**SLOT G TERMINAL PC BOARD (NAAF-8145-1)****CONNECTOR TERMINAL PC BOARD (NAETC-8146-1)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q1460,Q1465,Q1470	22240489R1NE	MPC4570G2-T1(MST)
Q1475,Q1476,Q1480	22240489R1NE	MPC4570G2-T1(MST)
Q1485,Q1486	22242107R2	WM8816
Q1490	22240489R1NE	MPC4570G2-T1(MST)
Q1655,Q1656	22242107R2	WM8816
Q1665,Q1666,Q1675	22240489R1NE	MPC4570G2-T1(MST)
Q1860	22242102R3	TC9274FG-023
Q1867	222780053R2JR	78L05(NJM78L05UA)
Q401,Q402,Q403,Q404	22240489R1NE	MPC4570G2-T1(MST)
Q405,Q406,Q415	22240489R1NE	MPC4570G2-T1(MST)
Q420	22242099R2	TC9162BFG
Q421	22242103R3	TC94A46FG
CIRCUIT NO.	PART NO.	DESCRIPTION
	Transistors	
Q1500,Q1501,Q1510	2215410R2	RN1441
Q1511,Q1520,Q1521	2215410R2	RN1441
Q1530,Q1531,Q1540	2215410R2	RN1441
Q1541,Q1550,Q1551	2215410R2	RN1441
Q1861,Q1863,Q1865	2213145R2 or	2SC2712-GR or
Q1868,Q1869,Q1870	2216175R2	KTC3875-GR
Q1862,Q1864,Q1866	2214530R2 or	RN2402 or
Q417,Q419	2216220R2	KRA102S
Q407,Q408,Q409	2215410R2	RN1441
Q410,Q411,Q412	2215410R2	RN1441
Q413,Q414	2215410R2	RN1441
Q416,Q418,Q422	2213145R2 or	2SC2712-GR or
Q423	2216175R2	KTC3875-GR
	Capacitors	
C1460,C1461	373022214R2	ECHU50V-221J,Chip film
C1465,C1466	395924707	CE04W6.3V-47M(RFS),Elect.
C1470,C1471	395924707	CE04W6.3V-47M(RFS),Elect.
C1475,C1476,C1525	395941007	CE04W16V-10M(RFS),Elect.
C1480,C1481	373021524R2	ECHU50V-152J,Chip film
C1485,C1486	342101014R1	CC725CH1H-101J1,Chip ceramic
C1490,C1491	373021234R2	ECHU50V-123J,Chip film
C1495,C1496	393341007	CE04W16V-10M(VX),Elect.
C1495,C1496	394641007	CE04W16V-10M(VR),Elect.
C1500,C1501	373023924R2	ECHU50V-392J,Chip film
C1505,C1506,C1515	374722244	ECQ-V50V-224J,Plastic film
C1510,C1511	393322217	CE04W6.3V-220M(VX),Elect.
C1516,C1695,C1696	374722244	ECQ-V50V-224J,Plastic film
C1520,C1521,C1550	393344707	CE04W16V-47M(VX),Elect.
C1520,C1521,C1550	394644707	CE04W16V-47M(VR),Elect.
C1526,C1625,C1626	395941007	CE04W16V-10M(RFS),Elect.
C1530,C1531,C1560	373023314R2	ECHU50V-331J,Chip film
C1540,C1541	395852207	CE04W25V-22M(ROB),Elect.
C1545,C1546	25060406	TP00509-3C
C1551,C1595,C1596	393344707	CE04W16V-47M(VX),Elect.
C1551,C1595,C1596	394644707	CE04W16V-47M(VR),Elect.
C1561,C1590,C1591	373023314R2	ECHU50V-331J,Chip film
C1570,C1571	395824707	CE04W6.3V-47M(ROB),Elect.
C1575,C1576,C1585	342101002R1	CC725CH1H-100D1,Chip ceramic
C1580,C1581	332161040R1	CK725F1E-104Z1,Chip ceramic
C1586,C1725,C1726	342101002R1	CC725CH1H-100D1,Chip ceramic
C1600,C1601,C1615	395924707	CE04W6.3V-47M(RFS),Elect.

C1605,C1606,C1735	393344707	CE04W16V-47M(VX),Elect.
C1605,C1606,C1735	394644707	CE04W16V-47M(VR),Elect.
C1610,C1611	332161040R1	CK725F1E-104Z1,Chip ceramic
C1616,C1655,C1656	395924707	CE04W6.3V-47M(RFS),Elect.
C1620,C1621,C1630	373021024R2	ECHU50V-102J,Chip film
C1631,C1640,C1641	373021024R2	ECHU50V-102J,Chip film
C1665,C1666	395941007	CE04W16V-10M(RFS),Elect.
C1675,C1676	342101014R1	CC725CH1H-101J1,Chip ceramic
C1685,C1686	393341007	CE04W16V-10M(VX),Elect.
C1685,C1686	394641007	CE04W16V-10M(VR),Elect.
C1705,C1706	374722244	ECQ-V50V-224J,Plastic film
C1715,C1716	395941007	CE04W16V-10M(RFS),Elect.
C1736,C1815,C1816	393344707	CE04W16V-47M(VX),Elect.
C1736,C1815,C1816	394644707	CE04W16V-47M(VR),Elect.
C1755,C1756	395941007	CE04W16V-10M(RFS),Elect.
C1765,C1766	25060406	TP00509-3C
C1795,R1796	342101002R1	CC725CH1H-100D1,Chip ceramic
C1805,C1806	395924707	CE04W6.3V-47M(RFS),Elect.
C1860	394664707	CE04W35V-47M(VR),Elect.
C1860	393364707	CE04W35V-47M(VX),Elect.
C1861,C1862,C1864	332161040R1	CK725F1E-104Z1,Chip ceramic
C1863	342103314R1	CC725CH1H-331J1,Chip ceramic
C1865,C1866,C1867	332161040R1	CK725F1E-104Z1,Chip ceramic
C1868	393324707	CE04W6.3V-47M(VX),Elect.
C1868 or	394624707	CE04W6.3V-47M(VR),Elect.
C1869,C1870,C1871	393341007	CE04W16V-10M(VX),Elect.
C1869,C1870,C1871	394641007	CE04W16V-10M(VR),Elect.
C1880,C1881	395852207	CE04W25V-22M(ROB),Elect.
C1890,C1891	395824707	CE04W6.3V-47M(ROB),Elect.
C1900,C1901,C1902	342103304R1	CC725CH1H-330J1,Chip ceramic
C1903,C1904,C1905	342103304R1	CC725CH1H-330J1,Chip ceramic
C1906,C1907	342103304R1	CC725CH1H-330J1,Chip ceramic
C401,C402,C403,C404	373023314R2	ECHU50V-331J,Chip film
C405,C406,C407,C408	373023314R2	ECHU50V-331J,Chip film
C409,C410,C411,C412	373023314R2	ECHU50V-331J,Chip film
C413,C414	395952207	CE04W25V-22M(RFS),Elect.
C415,C416,C417	395924707	CE04W6.3V-47M(RFS),Elect.
C418,C419,C420	395924707	CE04W6.3V-47M(RFS),Elect.
C421,C422,C423	395924707	CE04W6.3V-47M(RFS),Elect.
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C424,C443,C444	395924707	CE04W6.3V-47M(RFS),Elect.
C425,C426,C429	393344707	CE04W16V-47M(VX),Elect.
C425,C426,C429	394644707	CE04W16V-47M(VR),Elect.
C427,C428,C431	332161040R1	CK725F1E-104Z1,Chip ceramic
C430,C433,C434	393344707	CE04W16V-47M(VX),Elect.
C430,C433,C434	394644707	CE04W16V-47M(VR),Elect.
C432,C435,C436	332161040R1	CK725F1E-104Z1,Chip ceramic
C437,C438,C439,C440	373021024R2	ECHU50V-102J,Chip film
C441,C442	373023314R2	ECHU50V-331J,Chip film
C445,C446	393344707	CE04W16V-47M(VX),Elect.
C445,C446	394644707	CE04W16V-47M(VR),Elect.
C447,C448	393342217	CE04W16V-220M(VX),Elect.
C447,C448	394642217	CE04W16V-220M(VR),Elect.
C449,C450,C451,C452	332161040R1	CK725F1E-104Z1,Chip ceramic
C453,C456,C459	332161040R1	CK725F1E-104Z1,Chip ceramic
C454,C458	393364707	CE04W35V-47M(VX),Elect.
C454,C458	394664707	CE04W35V-47M(VR),Elect.
C455,C457	342103314R1	CC725CH1H-331J1,Chip ceramic
C460,C461	393341007	CE04W16V-10M(VX),Elect.
C460,C461	394641007	CE04W16V-10M(VR),Elect.
	Resistors	
R1460,R1461,R1550	435023314R1	RN72W1J-331JE,Chip carbon
R1465,R1466,R1475	435022244R1	RN72W1J-224JE,Chip carbon
R1470,R1471,R1560	435025634R1	RN72W1J-563JE,Chip carbon
R1476,R1505,R1506	435022244R1	RN72W1J-224JE,Chip carbon
R1480,R1481,R1515	435024744R1	RN72W1J-474JE,Chip carbon
R1485,R1486,R1495	435021054R1	RN72W1J-105JE,Chip carbon
R1490,R1491	435024734R1	RN72W1J-473JE,Chip carbon
R1496,R1685,R1686	435021054R1	RN72W1J-105JE,Chip carbon
R1500,R1501	435025614R1	RN72W1J-561JE,Chip carbon
R1510,R1511	435022744R1	RN72W1J-274JE,Chip carbon
R1516,R1525,R1526	435024744R1	RN72W1J-474JE,Chip carbon
R1520,R1521	435022234R1	RN72W1J-223JE,Chip carbon
R1530,R1531	435021224R1	RN72W1J-122JE,Chip carbon
R1535,R1536,R1705	435024744R1	RN72W1J-474JE,Chip carbon
R1540,R1541,R1660	435021004R1	RN72W1J-100JE,Chip carbon
R1551,R1580,R1581	435023314R1	RN72W1J-331JE,Chip carbon
R1561,R1590,R1591	435025634R1	RN72W1J-563JE,Chip carbon
R1570,R1571,R1600	435022244R1	RN72W1J-224JE,Chip carbon

R1601,R1630,R1631	435022244R1	RN72W1J-224JE,Chip carbon
R1610,R1611	435023314R1	RN72W1J-331JE,Chip carbon
R1620,R1621	435025634R1	RN72W1J-563JE,Chip carbon
R1640,R1641,R1690	435024704R1	RN72W1J-470JE,Chip carbon
R1650,R1651,R1655	435022244R1	RN72W1J-224JE,Chip carbon
R1656,R1665,R1666	435022244R1	RN72W1J-224JE,Chip carbon
R1661,R1710,R1711	435021004R1	RN72W1J-100JE,Chip carbon
R1670,R1671,R1720	435021014R1	RN72W1J-101JE,Chip carbon
R1675,R1676,R1700	435022244R1	RN72W1J-224JE,Chip carbon
R1680,R1681,R1730	435022214R1	RN72W1J-221JE,Chip carbon
R1691,R1740,R1741	435024704R1	RN72W1J-470JE,Chip carbon
R1695,R1696	435021054R1	RN72W1J-105JE,Chip carbon
R1701,R1750,R1751	435022244R1	RN72W1J-224JE,Chip carbon
R1706,R1715,R1716	435024744R1	RN72W1J-474JE,Chip carbon
R1721,R1770,R1771	435021014R1	RN72W1J-101JE,Chip carbon
R1725,R1726	435024744R1	RN72W1J-474JE,Chip carbon
R1731,R1780,R1781	435022214R1	RN72W1J-221JE,Chip carbon
R1760,R1761	435021004R1	RN72W1J-100JE,Chip carbon
R1866,R1867	435030004R1	RN72K1J-000JE,Chip carbon
R1868,R1869,R1870	435022244R1	RN72W1J-224JE,Chip carbon
R1871,R1872,R1873	435021034R1	RN72W1J-103JE,Chip carbon
R1874,R1875,R1876	435024724R1	RN72W1J-472JE,Chip carbon
R1877,R1878,R1879	435021024R1	RN72W1J-102JE,Chip carbon
R401,R402,R403,R404	435023314R1	RN72W1J-331JE,Chip carbon
R405,R406,R407,R408	435023314R1	RN72W1J-331JE,Chip carbon
R409,R410,R411,R412	435023314R1	RN72W1J-331JE,Chip carbon
R413,R414,R415,R416	435025634R1	RN72W1J-563JE,Chip carbon
R417,R418,R419,R420	435025634R1	RN72W1J-563JE,Chip carbon
R421,R422,R423,R424	435025634R1	RN72W1J-563JE,Chip carbon
R425,R426,R427,R428	435022244R1	RN72W1J-224JE,Chip carbon
R429,R430,R431,R432	435022244R1	RN72W1J-224JE,Chip carbon
R433,R434,R435,R436	435022244R1	RN72W1J-224JE,Chip carbon
R437,R438,R439,R440	435024704R1	RN72W1J-470JE,Chip carbon
R441,R442,R443,R444	435022244R1	RN72W1J-224JE,Chip carbon
R445,R446,R447,R448	435021004R1	RN72W1J-100JE,Chip carbon
R449,R450,R451,R452	435021014R1	RN72W1J-101JE,Chip carbon
R453,R454,R455,R456	435022214R1	RN72W1J-221JE,Chip carbon
R457,R458	435023314R1	RN72W1J-331JE,Chip carbon
R459,R460	435025634R1	RN72W1J-563JE,Chip carbon
R461,R462,R473,R474	435022244R1	RN72W1J-224JE,Chip carbon
R463,R464	443622204	RS1WBJ-22,Metal oxide
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R475,R476	435021034R1	RN72W1J-103JE,Chip carbon
R477,R478	435024724R1	RN72W1J-472JE,Chip carbon
R479,R480	435021024R1	RN72W1J-102JE,Chip carbon
R481	435030004R1	RN72K1J-000JE,Chip carbon
	Terminals	
P1860	25045424	NPJ-2PDBL249
P1861,P1862	25045565	NPJ-6PDBL380
P401,P402	25045565	NPJ-6PDBL380
P403	25045491	NPJ-4PDBL308
	Sockets	
P1863B,P1864B,B1865B	25051527	NSCT-16P1314
P406B,P407B,P408B	25051527	NSCT-16P1314
	Plugs	
P1863A,P1864A,P1865A	25055805	NPLG-16P761
P3108A,P3109A	25056324R2	IMSA-9850B-20Y902
P406A,P407A,P408A	25055805	NPLG-16P761
	Tape	
A001	29110083	16mm,Cloth

SLOT TERMINAL E PC BOARD (NAAF-8148-1A)
CIRCUIT NO.

	PART NO.	DESCRIPTION
	ICs	
Q1080,Q1081,Q1082	22240489R1NE	MPC4570G2-T1(MST)
Q1083,Q1084,Q1085	22240489R1NE	MPC4570G2-T1(MST)
Q1086,Q1087,Q1090	22240489R1NE	MPC4570G2-T1(MST)
Q1100,Q1110,Q1120	22240489R1NE	MPC4570G2-T1(MST)
Q1130,Q1140	22240489R1NE	MPC4570G2-T1(MST)
Q1150,Q1160	22240489R1NE	MPC4570G2-T1(MST)
Q1400	22242101R2	TC9164BFG
Q1401	22242100R2	TC9163BFG
Q1402,Q1405	22242092R2	AK5384VF
Q1403	22241547R2	NJM2370U33
Q1404	22241649R2	TC7WHU04FK
	Diodes	
D1400,D1401,D1402	223234R2 or	1SS352 or
D1403,D1404,D1405	223269R2	1SS355,Chip
D1406,D1407,D1408	223234R2 or	1SS352 or

D1409,D1410,D1411 D1412,D1413,D1414 D1415,D1416,D1417 D1418,D1419,D1420 D1421,D1422,D1423 D1424,D1425,D1426 D1427,D1428,D1429 D1430,D1431	223269R2 223234R2 or 223269R2 223234R2 or 223269R2 223234R2 or 223269R2 223234R2 or 223269R2 Coils 231237M022R2 233533M022R2 230958R1 230955R2 230955R2 Oscillator 3010385R2 Capacitors 373023314R2 395852207 393342217 394642217 373023314R2 395952207 373023314R2 395852207 373023314R2 395852207 393342217 394642217 395952207 373023314R2 373023314R2 395852207 395942207 395942207 395942207 373021524R2 373021524R2 373021524R2 393341017 394641017 332161040R1 PART NO. Capacitors 393341017 or 394641017 395824707 395942207 395824707 395852207 395852207 395852207 395824707 395824707 332161040R1 332161040R1 393364707 or 394664707 332161040R1 342101014R1 393380227 332161040R1 393341007 or 394641007 393321017 or 394621017 332161040R1 342101504R1 332161040R1 342101014R1 332161040R1 374721044 Resistors 435023314R1 435025634R1 435022244R1 443522204 435023314R1 435025634R1	1SS355,Chip 1SS352 or 1SS355,Chip 1SS352 or 1SS355,Chip 1SS352 or 1SS355,Chip 1SS352 or 1SS355,Chip 1SS352 or 1SS355,Chip NCH-1471,Choke NCH-1587-022M,Choke BK1608LM182-T,EMI BK1608HS102-T,EMI BK1608HS102-T,EMI FCX-03-24.576MHz ECHU50V-331J,Chip film CE04W25V-22M(ROB),Elect. CE04W16V-220M(VX),Elect. CE04W16V-220M(VR),Elect. ECHU50V-331J,Chip film CE04W25V-22M(RFS),Elect. ECHU50V-331J,Chip film CE04W25V-22M(ROB),Elect. ECHU50V-331J,Chip film CE04W25V-22M(ROB),Elect. CE04W16V-220M(VX),Elect. CE04W16V-220M(VR),Elect. CE04W25V-22M(RFS),Elect. ECHU50V-331J,Chip film ECHU50V-331J,Chip film CE04W25V-22M(ROB),Elect. CE04W16V-22M(RFS),Elect. CE04W16V-22M(RFS),Elect. CE04W16V-22M(RFS),Elect. ECHU50V-152J,Chip film ECHU50V-152J,Chip film ECHU50V-152J,Chip film CE04W16V-100M(VX),Elect. CE04W16V-100M(VR),Elect. CK725F1E-104Z1,Chip ceramic DESCRIPTION CE04W16V-100M(VX) or CE04W16V-100M(VR),Elect. CE04W6.3V-47M(ROB),Elect. CE04W16V-22M(RFS),Elect. CE04W6.3V-47M(ROB),Elect. CE04W25V-22M(ROB),Elect. CE04W25V-22M(ROB),Elect. CE04W25V-22M(ROB),Elect. CE04W6.3V-47M(ROB),Elect. CE04W6.3V-47M(ROB),Elect. CK725F1E-104Z1,Chip ceramic CK725F1E-104Z1,Chip ceramic CE04W35V-47M(VX) or CE04W35V-47M(VR),Elect. CK725F1E-104Z1,Chip ceramic CC725CH1H-101J1,Chip ceramic CE04W50V-2.2M(VX),Elect. CK725F1E-104Z1,Chip ceramic CE04W16V-10M(VX) or CE04W16V-10M(VR),Elect. CE04W6.3V-100M(VX) or CE04W6.3V-100M(VR),Elect. CK725F1E-104Z1,Chip ceramic CC725CH1H-150J1,Chip ceramic CK725F1E-104Z1,Chip ceramic CC725CH1H-101J1,Chip ceramic CK725F1E-104Z1,Chip ceramic ECQ-V50V-104J,Plastic film RN72W1J-331JE,Chip carbon RN72W1J-563JE,Chip carbon RN72W1J-224JE,Chip carbon RS1/2WBJ-22,Metal oxide RN72W1J-331JE,Chip carbon RN72W1J-563JE,Chip carbon
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R1051,R1080,R1081	435022244R1	RN72W1J-224JE,Chip carbon
R1090,R1091,R1120	435023314R1	RN72W1J-331JE,Chip carbon
R1100,R1101,R1130	435025634R1	RN72W1J-563JE,Chip carbon
R1110,R1111,R1140	435022244R1	RN72W1J-224JE,Chip carbon
R1121,R1150,R1151	435023314R1	RN72W1J-331JE,Chip carbon
R1131,R1160,R1161	435025634R1	RN72W1J-563JE,Chip carbon
R1141,R1170,R1171	435022244R1	RN72W1J-224JE,Chip carbon
R1143,R1340,R1341	443522204	RS1/2WBJ-22,Metal oxide
R1180,R1181,R1210	435023314R1	RN72W1J-331JE,Chip carbon
R1190,R1191,R1220	435025634R1	RN72W1J-563JE,Chip carbon
R1200,R1201,R1230	435022244R1	RN72W1J-224JE,Chip carbon
R1211,R1310,R1311	435023314R1	RN72W1J-331JE,Chip carbon
R1221,R1270,R1271	435025634R1	RN72W1J-563JE,Chip carbon
R1231,R1240,R1241	435022244R1	RN72W1J-224JE,Chip carbon
R1242,R1243,R1244	435022244R1	RN72W1J-224JE,Chip carbon
R1245,R1246,R1247	435022244R1	RN72W1J-224JE,Chip carbon
R1250,R1251,R1252	435021034R1	RN72W1J-103JE,Chip carbon
R1253,R1254,R1255	435021034R1	RN72W1J-103JE,Chip carbon
R1256,R1257,R1404	435021034R1	RN72W1J-103JE,Chip carbon
R1272,R1273,R1274	435025634R1	RN72W1J-563JE,Chip carbon
R1275,R1276,R1277	435025634R1	RN72W1J-563JE,Chip carbon
R1280,R1281,R1282	435025624R1	RN72W1J-562JE,Chip carbon
R1283,R1284,R1285	435025624R1	RN72W1J-562JE,Chip carbon
R1286,R1287	435025624R1	RN72W1J-562JE,Chip carbon
R1290,R1291,R1292	435024724R1	RN72W1J-472JE,Chip carbon
R1293,R1294,R1295	435024724R1	RN72W1J-472JE,Chip carbon
R1296,R1297,R1300	435024724R1	RN72W1J-472JE,Chip carbon
R1301,R1302,R1303	435024724R1	RN72W1J-472JE,Chip carbon
R1304,R1305,R1306	435024724R1	RN72W1J-472JE,Chip carbon
R1307	435024724R1	RN72W1J-472JE,Chip carbon
R1312,R1313,R1314	435023314R1	RN72W1J-331JE,Chip carbon
R1315,R1316,R1317	435023314R1	RN72W1J-331JE,Chip carbon
R1320,R1321,R1322	435023314R1	RN72W1J-331JE,Chip carbon
R1323,R1324,R1325	435023314R1	RN72W1J-331JE,Chip carbon
R1326,R1327	435023314R1	RN72W1J-331JE,Chip carbon
R1330,R1331,R1332	435025634R1	RN72W1J-563JE,Chip carbon
R1333,R1334,R1335	435025634R1	RN72W1J-563JE,Chip carbon
R1336,R1338	435025634R1	RN72W1J-563JE,Chip carbon
R1342,R1343	443522204	RS1/2WBJ-22,Metal oxide
R1402,R1403	435025604R1	RN72W1J-560JE,Chip carbon
R1405,R1409	435023314R1	RN72W1J-331JE,Chip carbon
R1407,R1415	435021024R1	RN72W1J-102JE,Chip carbon
R1408	435021054R1	RN72W1J-105JE,Chip carbon
R1411,R1412	435025604R1	RN72W1J-560JE,Chip carbon
R1416,R1417	435021034R1	RN72W1J-103JE,Chip carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R1420	435025614R1	RN72W1J-561JE,Chip carbon
R1450	435030004R1	RN72K1J-000JE,Chip carbon
	Terminals	
P1400,P1402	25045795	NPT-4PDGPRW575
P1401,P1403	25045796	NPT-4PDELNT576
	Plug	
P3107A	25056329R2	IMSA-9850B-30Y902
	Tape	
A001	29110083	16mm, Cloth
SLOT K PC BOARD (NARF-8152-1A/1C)		
CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q101	22242120R3	BU1924FS
Q102	222780125JRC or	78M12HF(NJM78M12FA) or
	222780125NEC	78M12HF(MPC78M12HF)
Q103	222780053JRC	78L05(NJM78L05A)
Q104	222740077R2TO	TC74HCT7007AF
Q105	22274125ER2TO	TC74VHC125FT
	Oscillator	
X100	3010321	HC-49/U034.332MHz
	Capacitors	
C100	355780339	CE04W50V-3.3M,Elect.
C101,C103	394680337 or	CE04W50V-3.3M(VR) or
	393380337	CE04W50V-3.3M(VX),Elect.
C102	345021014	CC45SL50V-101J,Ceramic
C104,C115,C117	335622230	CK45F50V-223Z,Ceramic
C116	393341017 or	CE04W16V-100M(VX) or
	394641017	CE04W16V-100M(VR),Elect.
C118	393321017 or	CE04W6.3V-100M(VX) or
	394621017	CE04W6.3V-100M(VR),Elect.
C119,C120	335622230	CK45F50V-223Z,Ceramic
	Resistors	

R100,R101	417343314	R16J-330,Carbon
R102,R104,R105,R106	417341044	R16J-100K,Carbon
R103	417341014	R16J-100,Carbon
R112	417345624	R16J-5.6K,Carbon <DT/GT/R/K>
R127,R128,R129,R130	417341024	R16J-1K,Carbon
R134	417341024	R16J-1K,Carbon
	Socket	
P100	25052211	NSCT-15P2108
	Plug	
P3115A	25056314	IMSA-9850B-30A-GF

DIR CIRCUIT PC BOARD (NADG-8162-1)
CIRCUIT NO. PART NO.

	ICs	
Q7001,Q7002,Q7003	222741515R2TO	TC74HC151F
Q7004,Q7241	22274126GR2	TC74VHCT126AFT
Q7011	22242090R2	BU2152FS
Q7021,Q7121,Q7221	22241633R3	AK4114VQ
Q7051,Q7151	22242091R2	AK5385AVF
Q7052,Q7053,Q7054	22241448R2	NJM4580M-D
Q7061,Q7062,Q7063	22274153ER2TO	TC74VHC153FT
Q7152,Q7153,Q7154	22241448R2	NJM4580M-D
Q7161,Q7162,Q7163	22274153ER2TO	TC74VHC153FT
Q7242	22241894R2	TC74VHCT125AFT
Q7243,Q7309	222780053R2JR	78L05(NJM78L05UA)
Q7244,Q7304,Q7305	22240928R2	TC9246F
Q7245,Q7421	22241821R2	WM8716EDS
Q7271,Q7272,Q7273	22241448R2	NJM4580M-D
Q7274,Q7423,Q7424	22241448R2	NJM4580M-D
Q7310	22242095R2	TC7WH34FK
Q7311	22241917R2TO	TC7WT125FU
Q7401,Q7402	22278033DR2NE	MPC2933T
Q7425,Q7426	22241448R2	NJM4580M-D
	Modules	
U7001,U7002,U7003	24120113	GP1FA51HRZ
U7004,U7005,U7006	24120113	GP1FA51HRZ
U7007,U7008	24120114	GP1FA51HTZ
	Oscillators	
X7021,X7121,X7221	3010385R2	FCX-03-24.576MHz
	Diodes	
D7051,D7052,D7053	223234R2 or	1SS352 or
D7054,D7055,D7056	223269R2	1SS355,Chip
D7057,D7058	223234R2 or	1SS352 or
D7151,D7152,D7153	223269R2	1SS355,Chip
D7154,D7155,D7156	223234R2 or	1SS352 or
D7157,D7158	223269R2	1SS355,Chip

CIRCUIT NO.	PART NO.	DESCRIPTION
	Coils	
L7001,L7021,L7022	231237M022R2	NCH-1471,Choke
L7002,L7241,L7242	231237K470R2	NCH-1479,Choke
L7023,L7051,L7052	231237M022R2	NCH-1471,Choke
L7024,L7124	230958R1	BK1608LM182-T,EMI
L7121,L7122,L7123	231237M022R2	NCH-1471,Choke
L7151,L7152,L7221	231237M022R2	NCH-1471,Choke
L7222,L7224,L7401	231237M022R2	NCH-1471,Choke
L7244,L7245,L7302	231237K470R2	NCH-1479,Choke
L7303,L7304,L7305	231237K470R2	NCH-1479,Choke
L7306,L7307	230958R1	BK1608LM182-T,EMI
L7421,L7422	231237K470R2	NCH-1479,Choke
R7027	230984R1	BK1608HS601-T,EMI
R7029,R7092,R7129	230955R2	BK1608HS102-T,EMI
R7192,R7229	230955R2	BK1608HS102-T,EMI
R7263,R7395,R7396	230958R1	BK1608LM182-T,EMI
	Capacitors	
C7029,C7129,C7229	332101025R1	CK725B1H-102K1,Chip ceramic
C7061,C7062	332101035R1	CK725B1H-103K1,Chip ceramic
C7161,C7162	332101035R1	CK725B1H-103K1,Chip ceramic
C7059,C7160	332132245R1	CK725B1A-224K1,Chip ceramic
C7253,C7368,C7372	332134745R1	CK725B1A-474K1,Chip ceramic
C7002,C7003,C7004	332161040R1	CK725F1E-104Z1,Chip ceramic
C7005,C7006,C7007	332161040R1	CK725F1E-104Z1,Chip ceramic
C7010,C7011,C7012	332161040R1	CK725F1E-104Z1,Chip ceramic
C7013,C7014,C7016	332161040R1	CK725F1E-104Z1,Chip ceramic
C7017,C7021,C7023	332161040R1	CK725F1E-104Z1,Chip ceramic
C7025,C7053,C7054	332161040R1	CK725F1E-104Z1,Chip ceramic
C7056,C7058,C7071	332161040R1	CK725F1E-104Z1,Chip ceramic
C7075,C7076,C7077	332161040R1	CK725F1E-104Z1,Chip ceramic
C7121,C7123,C7125	332161040R1	CK725F1E-104Z1,Chip ceramic
C7153,C7154,C7156	332161040R1	CK725F1E-104Z1,Chip ceramic

C7158,C7175,C7176	332161040R1	CK725F1E-104Z1,Chip ceramic
C7177,C7221,C7223	332161040R1	CK725F1E-104Z1,Chip ceramic
C7225,C7242,C7244	332161040R1	CK725F1E-104Z1,Chip ceramic
C7245,C7248,C7250	332161040R1	CK725F1E-104Z1,Chip ceramic
C7256,C7258,C7260	332161040R1	CK725F1E-104Z1,Chip ceramic
C7263,C7264,C7356	332161040R1	CK725F1E-104Z1,Chip ceramic
C7358,C7360,C7362	332161040R1	CK725F1E-104Z1,Chip ceramic
C7364,C7374,C7375	332161040R1	CK725F1E-104Z1,Chip ceramic
C7423,C7424,C7429	332161040R1	CK725F1E-104Z1,Chip ceramic
C7431	332161040R1	CK725F1E-104Z1,Chip ceramic
C7401,C7403	332181050R1	CK725F1A-105Z1,Chip ceramic
C7028,C7128,C7228	342101014R1	CC725CH1H-101J1,Chip ceramic
C7254,C7367,C7371	342101024R1	CC725CH1H-102J1,Chip ceramic
C7030,C7031,C7130	342101804R1	CC725CH1H-180J1,Chip ceramic
C7131,C7230,C7231	342101804R1	CC725CH1H-180J1,Chip ceramic
C7252,C7369,C7373	342104704R1	CC725CH1H-470J1,Chip ceramic
C7001,C7009,C7015	356724709R2	CEWX6.3V-47M,Chip elect.
C7063,C7064,C7163	356724709R2	CEWX6.3V-47M,Chip elect.
C7164,C7249,C7251	356724709R2	CEWX6.3V-47M,Chip elect.
C7359,C7361,C7363	356724709R2	CEWX6.3V-47M,Chip elect.
C7365	356724709R2	CEWX6.3V-47M,Chip elect.
C7026,C7051,C7052	356741009R2	CEWX16V-10M,Chip elect.
C7055,C7057,C7072	356741009R2	CEWX16V-10M,Chip elect.
C7126,C7151,C7152	356741009R2	CEWX16V-10M,Chip elect.
C7155,C7157,C7226	356741009R2	CEWX16V-10M,Chip elect.
C7241,C7243,C7247	356741009R2	CEWX16V-10M,Chip elect.
C7257,C7259,C7265	356741009R2	CEWX16V-10M,Chip elect.
C7266,C7357,C7425	356741009R2	CEWX16V-10M,Chip elect.
C7426,C7430,C7432	356741009R2	CEWX16V-10M,Chip elect.
C7069,C7070,C7169	356744709R2	CEWX16V-47M,Chip elect.
C7170,C7279,C7280	356744709R2	CEWX16V-47M,Chip elect.
C7441,C7442	356744709R2	CEWX16V-47M,Chip elect.
C7271,C7272	356760479R2	CEWX35V-4.7M,Chip elect.
C7433,C7434	356760479R2	CEWX35V-4.7M,Chip elect.
C7027,C7127,C7227	356784799R2	CEWX50V-0.47M,Chip elect.
C7402,C7404	3567A1019R2	CEWX4V-100M,Chip elect.
C7281,C7282	3567A2209R2	CEWX4V-22M,Chip elect.
C7022,C7024,C7122	3567A4709R2	CEWX4V-47M,Chip elect.
C7124,C7222,C7224	3567A4709R2	CEWX4V-47M,Chip elect.
C7273,C7274	373021524R2	ECHU50V-152J,Chip film
C7435,C7436	373021524R2	ECHU50V-152J,Chip film
C7277,C7278	373024714R2	ECHU50V-471J,Chip film
C7439,C7440	373024714R2	ECHU50V-471J,Chip film
C7275,C7276	373028214R2	ECHU50V-821J,Chip film
C7437,C7438	373028214R2	ECHU50V-821J,Chip film
C7267,C7268	373041044R2	ECHU16V-104J,Chip film
C7427,C7428	373041044R2	ECHU16V-104J,Chip film

CIRCUIT NO.**PART NO.****DESCRIPTION**

R7011,R7012,R7013	435033314R1	RN72K1J-331JE,Chip carbon
R7014,R7032,R7034	435031024R1	RN72K1J-102JE,Chip carbon
R7021,R7022,R7023	435033314R1	RN72K1J-331JE,Chip carbon
R7024,R7025,R7026	435033314R1	RN72K1J-331JE,Chip carbon
R7028,R7030,R7033	435034704R1	RN72K1J-470JE,Chip carbon
R7031,R7040,R7051	435033314R1	RN72K1J-331JE,Chip carbon
R7035,R7036,R7055	435031024R1	RN72K1J-102JE,Chip carbon
R7037,R7038	435034704R1	RN72K1J-470JE,Chip carbon
R7039,R7139,R7239	435031834R1	RN72K1J-183JE,Chip carbon
R7052,R7053,R7054	435034704R1	RN72K1J-470JE,Chip carbon
R7057,R7058,R7157	435031044R1	RN72K1J-104JE,Chip carbon
R7059,R7060	435033944R1	RN72K1J-394JE,Chip carbon
R7061,R7062,R7073	435031034R1	RN72K1J-103JE,Chip carbon
R7063,R7064,R7065	435034724R1	RN72K1J-472JE,Chip carbon
R7066,R7067,R7068	435034724R1	RN72K1J-472JE,Chip carbon
R7069,R7070,R7071	435032204R1	RN72K1J-220JE,Chip carbon
R7072,R7169,R7170	435032204R1	RN72K1J-220JE,Chip carbon
R7074,R7161,R7162	435031034R1	RN72K1J-103JE,Chip carbon
R7075,R7076,R7077	435033314R1	RN72K1J-331JE,Chip carbon
R7078,R7079,R7080	435033314R1	RN72K1J-331JE,Chip carbon
R7081,R7082,R7083	435033314R1	RN72K1J-331JE,Chip carbon
R7084,R7085,R7086	435033314R1	RN72K1J-331JE,Chip carbon
R7087,R7088,R7089	435033314R1	RN72K1J-331JE,Chip carbon
R7090,R7121,R7122	435033314R1	RN72K1J-331JE,Chip carbon
R7091,R7093,R7094	435034704R1	RN72K1J-470JE,Chip carbon
R7095,R7127,R7128	435034704R1	RN72K1J-470JE,Chip carbon
R7123,R7124,R7125	435033314R1	RN72K1J-331JE,Chip carbon
R7126,R7131,R7140	435033314R1	RN72K1J-331JE,Chip carbon
R7130,R7133,R7137	435034704R1	RN72K1J-470JE,Chip carbon

R7132,R7134,R7135	435031024R1	RN72K1J-102JE,Chip carbon
R7136,R7155,R7232	435031024R1	RN72K1J-102JE,Chip carbon
R7138,R7152,R7153	435034704R1	RN72K1J-470JE,Chip carbon
R7151,R7175,R7176	435033314R1	RN72K1J-331JE,Chip carbon
R7154,R7191,R7193	435034704R1	RN72K1J-470JE,Chip carbon
R7158,R7275,R7276	435031044R1	RN72K1J-104JE,Chip carbon
R7159,R7160	435033944R1	RN72K1J-394JE,Chip carbon
R7163,R7164,R7165	435034724R1	RN72K1J-472JE,Chip carbon
R7166,R7167,R7168	435034724R1	RN72K1J-472JE,Chip carbon
R7171,R7172,R7269	435032204R1	RN72K1J-220JE,Chip carbon
R7177,R7178,R7179	435033314R1	RN72K1J-331JE,Chip carbon
R7180,R7181,R7182	435033314R1	RN72K1J-331JE,Chip carbon
R7183,R7184,R7185	435033314R1	RN72K1J-331JE,Chip carbon
R7186,R7187,R7188	435033314R1	RN72K1J-331JE,Chip carbon
R7189,R7190,R7201	435033314R1	RN72K1J-331JE,Chip carbon
R7194,R7195,R7227	435034704R1	RN72K1J-470JE,Chip carbon
R7202,R7203,R7211	435033314R1	RN72K1J-331JE,Chip carbon
R7212,R7213	435033314R1	RN72K1J-331JE,Chip carbon
R7221,R7222,R7223	435033314R1	RN72K1J-331JE,Chip carbon
R7224,R7225,R7226	435033314R1	RN72K1J-331JE,Chip carbon
R7228,R7230,R7233	435034704R1	RN72K1J-470JE,Chip carbon
R7234,R7235,R7236	435031024R1	RN72K1J-102JE,Chip carbon
R7237,R7238,R7244	435034704R1	RN72K1J-470JE,Chip carbon
R7240,R7241	435033314R1	RN72K1J-331JE,Chip carbon
R7242,R7243	435033314R1	RN72K1J-331JE,Chip carbon
R7245,R7246,R7250	435034704R1	RN72K1J-470JE,Chip carbon
R7247,R7248,R7249	435033314R1	RN72K1J-331JE,Chip carbon
R7251,R7252,R7264	435034704R1	RN72K1J-470JE,Chip carbon
R7253,R7258,R7259	435033314R1	RN72K1J-331JE,Chip carbon
R7254,R7368,R7372	435031014R1	RN72K1J-101JE,Chip carbon
R7255,R7285,R7286	435031524R1	RN72K1J-152JE,Chip carbon
R7256,R7370,R7374	435035624R1	RN72K1J-562JE,Chip carbon
R7260,R7262	435033314R1	RN72K1J-331JE,Chip carbon
R7261,R7425	435031024R1	RN72K1J-102JE,Chip carbon
R7267,R7268	435032244R1	RN72K1J-224JE,Chip carbon
R7270,R7457,R7458	435032204R1	RN72K1J-220JE,Chip carbon
R7271,R7272,R7277	435031034R1	RN72K1J-103JE,Chip carbon
R7273,R7274	435035614R1	RN72K1J-561JE,Chip carbon
R7278,R7281,R7282	435031034R1	RN72K1J-103JE,Chip carbon
R7279,R7280	435032734R1	RN72K1J-273JE,Chip carbon
R7283,R7284,R7299	435031034R1	RN72K1J-103JE,Chip carbon
R7287,R7288,R7289	435032234R1	RN72K1J-223JE,Chip carbon
R7290,R7291,R7292	435032234R1	RN72K1J-223JE,Chip carbon
R7293,R7294,R7443	435032234R1	RN72K1J-223JE,Chip carbon
R7295,R7296,R7297	435031524R1	RN72K1J-152JE,Chip carbon
R7298,R7369,R7373	435031524R1	RN72K1J-152JE,Chip carbon
R7300,R7427,R7428	435031034R1	RN72K1J-103JE,Chip carbon
R7331,R7332	435034704R1	RN72K1J-470JE,Chip carbon
R7367,R7371	435033314R1	RN72K1J-331JE,Chip carbon
R7402,R7403	435320124R2	RN72K3A-012JE,Chip carbon
R7421,R7422,R7423	435033314R1	RN72K1J-331JE,Chip carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R7424,R7426	435033314R1	RN72K1J-331JE,Chip carbon
R7429,R7430	435035614R1	RN72K1J-561JE,Chip carbon
R7431,R7432	435031044R1	RN72K1J-104JE,Chip carbon
R7433,R7434,R7437	435031034R1	RN72K1J-103JE,Chip carbon
R7435,R7436	435032734R1	RN72K1J-273JE,Chip carbon
R7438,R7439,R7440	435031034R1	RN72K1J-103JE,Chip carbon
R7441,R7442,R7451	435031524R1	RN72K1J-152JE,Chip carbon
R7444,R7445,R7446	435032234R1	RN72K1J-223JE,Chip carbon
R7447,R7448,R7449	435032234R1	RN72K1J-223JE,Chip carbon
R7450	435032234R1	RN72K1J-223JE,Chip carbon
R7452,R7453,R7454	435031524R1	RN72K1J-152JE,Chip carbon
R7455,R7456	435031034R1	RN72K1J-103JE,Chip carbon
	Sockets	
P7002	25052810R2	IMSA-9850S-14Y900
P7402A,P7403A	25053006R2	IMSA-9832S-30Y930
	Plug	
P7401	25056332R2	IMSA-9828B-100Y900
DAC PC BOARD(NADG-8163-1)		
CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q701,Q7301	22242093R3	NS D610A002GDP225
Q702,Q7302	22241649R2	TC7WHU04FK
Q706,Q707	22242094R3	IC42S16800-7T
Q708	W0018R300967M100	MX29LV160BBTC-70
Q7306,Q7307	22242094R3	IC42S16800-7T
Q7308	W0018R300966M100	MX29LV160BBTC-70

Q7403,Q803	22242096R2	BD3502FVM
Q7404,Q804	Transistors	
	2216920R2	2SK2094
	Diodes	
D701,D702,D703,D704	223234R2 or	1SS352 or
	223269R2	1SS355,Chip
D705,D7305	223274R2	CRS09
D7301,D7302	223234R2 or	1SS352 or
D7303,D7304	223269R2	1SS355,Chip
	Coils	
L701,L7301	230978R2	ACF451832-333-T,EMI
R7320,R7321,R7322	230984R1	BK1608HS601-T,EMI
R7323,R7324	230984R1	BK1608HS601-T,EMI
	Oscillators	
X701,X7301	3010393R2	FCX-03-30.000MHz
	Capacitors	
C701,C702,C703,C704	395541007R2	F93-16V-10M,Chip tantal
C705,C725,C726,C727	395541007R2	F93-16V-10M,Chip tantal
C706,C707,C708,C709	332161040R1	CK725F1E-104Z1,Chip ceramic
C710,C711,C712,C713	332161040R1	CK725F1E-104Z1,Chip ceramic
C714,C715,C716,C717	332161040R1	CK725F1E-104Z1,Chip ceramic
C718,C719,C720,C721	332161040R1	CK725F1E-104Z1,Chip ceramic
C722,C723,C724,C732	332161040R1	CK725F1E-104Z1,Chip ceramic
C728,C729,C730,C731	395541007R2	F93-16V-10M,Chip tantal
C7301,C7302,C7303	395541007R2	F93-16V-10M,Chip tantal
C7304,C7305,C7325	395541007R2	F93-16V-10M,Chip tantal
C7306,C7307,C7308	332161040R1	CK725F1E-104Z1,Chip ceramic
C7309,C7310,C7311	332161040R1	CK725F1E-104Z1,Chip ceramic
C7312,C7313,C7314	332161040R1	CK725F1E-104Z1,Chip ceramic
C7315,C7316,C7317	332161040R1	CK725F1E-104Z1,Chip ceramic
C7318,C7319,C7320	332161040R1	CK725F1E-104Z1,Chip ceramic
C7321,C7322,C7323	332161040R1	CK725F1E-104Z1,Chip ceramic
C7324,C7332,C7333	332161040R1	CK725F1E-104Z1,Chip ceramic
C7326,C7327,C7328	395541007R2	F93-16V-10M,Chip tantal
C7329,C7330,C7331	395541007R2	F93-16V-10M,Chip tantal
C733,C734,C735,C736	332161040R1	CK725F1E-104Z1,Chip ceramic
C7334,C7335,C7336	332161040R1	CK725F1E-104Z1,Chip ceramic
C7337,C7338,C7339	332161040R1	CK725F1E-104Z1,Chip ceramic
C7340,C7341,C7342	332161040R1	CK725F1E-104Z1,Chip ceramic
C7343,C7344,C7345	332161040R1	CK725F1E-104Z1,Chip ceramic
C7346,C7347,C7349	332161040R1	CK725F1E-104Z1,Chip ceramic
C7348,C7406,C7411	395541007R2	F93-16V-10M,Chip tantal
C7353,C7380,C7382	332161040R1	CK725F1E-104Z1,Chip ceramic
C7354,C754	342101204R1	CC725CH1H-120J1,Chip ceramic
C7355,C755	342101504R1	CC725CH1H-150J1,Chip ceramic
C737,C738,C739,C740	332161040R1	CK725F1E-104Z1,Chip ceramic
C7379,C7381,C7383	342101024R1	CC725CH1H-102J1,Chip ceramic
C7384,C7386,C7388	332161040R1	CK725F1E-104Z1,Chip ceramic
C7385,C7387,C7389	342101024R1	CC725CH1H-102J1,Chip ceramic
C7390,C7392,C7394	332161040R1	CK725F1E-104Z1,Chip ceramic
C7391,C7393,C7395	342101024R1	CC725CH1H-102J1,Chip ceramic
C7396,C7398,C7405	332161040R1	CK725F1E-104Z1,Chip ceramic
C7397	342101024R1	CC725CH1H-102J1,Chip ceramic
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C7407,C7408	332102225R1	CK725B1H-222K1,Chip ceramic
C741,C742,C743,C744	332161040R1	CK725F1E-104Z1,Chip ceramic
C7410,C810	395522217R2	F93-6.3V-220M,Chip tantal
C7412	332161040R1	CK725F1E-104Z1,Chip ceramic
C745,C746,C747,C749	332161040R1	CK725F1E-104Z1,Chip ceramic
C748,C806,C811	395541007R2	F93-16V-10M,Chip tantal
C753,C780,C782,C784	332161040R1	CK725F1E-104Z1,Chip ceramic
C779,C781,C783,C785	342101024R1	CC725CH1H-102J1,Chip ceramic
C786,C788,C790,C792	332161040R1	CK725F1E-104Z1,Chip ceramic
C787,C789,C791,C793	342101024R1	CC725CH1H-102J1,Chip ceramic
C794,C796,C798	332161040R1	CK725F1E-104Z1,Chip ceramic
C795,C797	342101024R1	CC725CH1H-102J1,Chip ceramic
C805,C812	332161040R1	CK725F1E-104Z1,Chip ceramic
C807,C808	332102225R1	CK725B1H-222K1,Chip ceramic
	Resistors	
R701,R712,R713,R714	435033314R1	RN72K1J-331JE,Chip carbon
R702,R7302	435033924R1	RN72K1J-392JE,Chip carbon
R706,R7306	435031514R1	RN72K1J-151JE,Chip carbon
R708,R7308	435034714R1	RN72K1J-471JE,Chip carbon
R709,R710,R718,R720	435034704R1	RN72K1J-470JE,Chip carbon
R715,R716,R717,R736	435033314R1	RN72K1J-331JE,Chip carbon
R725,R750,R753,R757	435031824R1	RN72K1J-182JE,Chip carbon
R7301,R7312,R7313	435033314R1	RN72K1J-331JE,Chip carbon
R7309,R7310,R7318	435034704R1	RN72K1J-470JE,Chip carbon
R7314,R7315,R7316	435033314R1	RN72K1J-331JE,Chip carbon

R7317,R7336,R7337	435033314R1	RN72K1J-331JE,Chip carbon
R7325,R7350,R7353	435031824R1	RN72K1J-182JE,Chip carbon
R7338,R7341,R7342	435034704R1	RN72K1J-470JE,Chip carbon
R7340,R740	435033324R1	RN72K1J-332JE,Chip carbon
R7344,R7394,R7397	435033314R1	RN72K1J-331JE,Chip carbon
R7354	435034704R1	RN72K1J-470JE,Chip carbon
R7355,R755	435035614R1	RN72K1J-561JE,Chip carbon
R7356,R756	435031054R1	RN72K1J-105JE,Chip carbon
R7357,R7358,R7359	435031824R1	RN72K1J-182JE,Chip carbon
R7360	435031824R1	RN72K1J-182JE,Chip carbon
R737,R744,R794,R797	435033314R1	RN72K1J-331JE,Chip carbon
R7376,R7377,R7378	435033304R1	RN72K1J-330JE,Chip carbon
R7379,R7380	435033304R1	RN72K1J-330JE,Chip carbon
R738,R741,R742,R754	435034704R1	RN72K1J-470JE,Chip carbon
R7381,R7382	435033304R1	RN72K1J-330JE,Chip carbon
R7390,R7391,R7392	435031034R1	RN72K1J-103JE,Chip carbon
R7398,R798	435031834R1	RN72K1J-183JE,Chip carbon
R758,R759,R760	435031824R1	RN72K1J-182JE,Chip carbon
R776,R777,R778,R779	435033304R1	RN72K1J-330JE,Chip carbon
R780,R781,R782	435033304R1	RN72K1J-330JE,Chip carbon
R790,R791,R792	435031034R1	RN72K1J-103JE,Chip carbon
	Plugs	
P701,P7301	25056542	IMSA-9204B-2-13Z122-GF
P7402B,P7403B	25056364R2	IMSA-9831B-30Y930
P7404A	25055966R2	NPLG-6P919
	Tape	
A001	29110083	16mm,Cloth

IEEE TERMINAL PC BOARD(NADG-8164-1A)

Except Chenease model

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q3001	22278033DR2NE or 22278033DR2JR	MPC2933T or NJM2391DL1-33
Q3003	22274157DR2TO	TC74VCX157FT
Q3004	22242061R3	TSB43CA42PGF
Q3005	22274541GR2PH	74AHCT541PW
Q3008,Q3518	22241895R2	TC7SZ125FU
Q3009	22242062R2	TLC2932IPWLE
Q3010	22241546R2	TC7WT241FU
Q3501	W0009R301273M101	MBM29LV800TA-90PFTN
Q3502	W0008R300954M100	HD64F2367VF33(DVSP1000)
Q3505,Q3506	22241830R2TO	TC7SH08FU
Q3508	22241778R2	BA33C25FP
Q3509	22242112R3	SM5819AF
Q3511	22241642R2	S-80127CNMC-JKM-T2
Q3513	222780053R2JR	78L05(NJM78L05UA)
Q3515	22242079R2PH	74AHCT1G04GW
Q3516	22274040ER2TO	TC74VHC4040FT
Q3517	22240928R2	TC9246F
Q3519	22274541BR2PH or 22274541BR2TO	74ALVC541PW or TC74LCX541FT
Q3519 or		
	Transistors	
Q3503	2216730R2	DTC114EE
Q3512	2216710R2	DTA114EE
	PART NO.	DESCRIPTION
	Coils	
L3001,L3002,L3003	231237M022R2	NCH-1471,Choke
L3004,L3005,L3501	231237M022R2	NCH-1471,Choke
L3009,L3010	230977R2	DLP11SN161SL2L
L3011,L3012	230977R2	DLP11SN161SL2L
L3502,L3503,L3504	231237M022R2	NCH-1471,Choke
L3508,L3509,L3510	231237K470R2	NCH-1479,Choke
L3511,L3512,L3513	230955R2	BK1608HS102-T,EMI
L3514,L3515,L3516	230955R2	BK1608HS102-T,EMI
L3517,L3518,L3519	230955R2	BK1608HS102-T,EMI
R3523,R3524,R3525	230955R2	BK1608HS102-T,EMI
	Oscillators	
X3001	3010385R2	FCX-03-24.576MHz
X3501	3010384R2	FCX-03-16.000MHz
	Capacitors	
C3001	356722219R2	CEWX6.3V-220M,Chip elect.
C3002,C3004,C3005	332161040R1	CK725F1E-104Z1,Chip ceramic
C3003,C3006,C3025	3567A2219R2	CEWX4V-220M,Chip elect.
C3007,C3008,C3009	332161040R1	CK725F1E-104Z1,Chip ceramic
C3010,C3011,C3012	332161040R1	CK725F1E-104Z1,Chip ceramic
C3013,C3014,C3016	332161040R1	CK725F1E-104Z1,Chip ceramic
C3015,C3019,C3022	342101024R1	CC725CH1H-102J1,Chip ceramic
C3018,C3020,C3021	332161040R1	CK725F1E-104Z1,Chip ceramic
C3023,C3026,C3032	332161040R1	CK725F1E-104Z1,Chip ceramic

C3024,C3045	332121045R1	CK725B1C-104K1,Chip ceramic
C3027,C3028	342101204R1	CC725CH1H-120J1,Chip ceramic
C3031,C3035,C3039	342101024R1	CC725CH1H-102J1,Chip ceramic
C3033,C3034,C3036	332161040R1	CK725F1E-104Z1,Chip ceramic
C3041	332132245R1	CK725B1A-224K1,Chip ceramic
C3044	332121055R1	CK725B1C-105K1,Chip ceramic
C3046,C3049	356721019R2	CEWX6.3V-100M,Chip elect.
C3047,LC3048,C3050	332161040R1	CK725F1E-104Z1,Chip ceramic
C3051,C3052	332181050R1	CK725F1A-105Z1,Chip ceramic
C3053C3054,C3057	332161040R1	CK725F1E-104Z1,Chip ceramic
C3055,C3056	342102214R1	CC725CH1H-221J1,Chip ceramic
C3058,C3060,C3062	332161040R1	CK725F1E-104Z1,Chip ceramic
C3061,C3063,C3064	342101024R1	CC725CH1H-102J1,Chip ceramic
C3065,C3066,C3067	342101024R1	CC725CH1H-102J1,Chip ceramic
C3068,C3069	342101024R1	CC725CH1H-102J1,Chip ceramic
C3501,C3503,C3506	3567A2219R2	CEWX4V-220M,Chip elect.
C3502,C3504,C3505	332161040R1	CK725F1E-104Z1,Chip ceramic
C3507,C3509,C3512	332161040R1	CK725F1E-104Z1,Chip ceramic
C3508,C3528,C3532	3567A2219R2	CEWX4V-220M,Chip elect.
C3510,C3511	342101804R1	CC725CH1H-180J1,Chip ceramic
C3514,C3516,C3521	332161040R1	CK725F1E-104Z1,Chip ceramic
C3517,C3518	342101804R1	CC725CH1H-180J1,Chip ceramic
C3530,C3560	356721019R2	CEWX6.3V-100M,Chip elect.
C3531,C3553	342101024R1	CC725CH1H-102J1,Chip ceramic
C3533,C3535,C3551	3567A2219R2	CEWX4V-220M,Chip elect.
C3534,C3536,C3537	332161040R1	CK725F1E-104Z1,Chip ceramic
C3541,C3543,C3546	332161040R1	CK725F1E-104Z1,Chip ceramic
C3547,C3548,C3549	332161040R1	CK725F1E-104Z1,Chip ceramic
C3550,C3552,C3556	332161040R1	CK725F1E-104Z1,Chip ceramic
C3554	337394745R1	CK732B1C-474K ,Chip ceramic
C3555	342104704R1	CC725CH1H-470J1,Chip ceramic
C3557,C3558	332161040R1	CK725F1E-104Z1,Chip ceramic
C3559,C3561	332161040R1	CK725F1E-104Z1,Chip ceramic
C3562,C3563	356724709R2	CEWX6.3V-47M,Chip elect.
C3564	356751009R2	CEWX25V-10M,Chip elect.
	Composite parts	
R3005,R3006,R3007	43474433004R1	RM4KJ330X04,Composite
R3008,R3009,R3010	43474433004R1	RM4KJ330X04,Composite
R3011,R3015	43474410304R1	RM4KJ103X04,Composite
R3020,R3021	43474410304R1	RM4KJ103X04,Composite
R3043,R3045,R3048	43474410304R1	RM4KJ103X04,Composite
R3063,R3069,R3089	43474433004R1	RM4KJ330X04,Composite
R3090,R3501,R3505	43474433004R1	RM4KJ330X04,Composite
R3504,R3533,R3585	43474410304R1	RM4KJ103X04,Composite
R3506,R3507,R3512	43474433004R1	RM4KJ330X04,Composite
R3516,R3517,R3518	43474433004R1	RM4KJ330X04,Composite
R3535,R3538,R3542	43474433004R1	RM4KJ330X04,Composite
R3543,R3545,R3546	43474433004R1	RM4KJ330X04,Composite
R3547,R3548,R3549	43474433004R1	RM4KJ330X04,Composite
R3550,R3551,R3554	43474433004R1	RM4KJ330X04,Composite
R3564,R3565	43474433004R1	RM4KJ330X04,Composite
R3586,R3587,R3588	43474433004R1	RM4KJ330X04,Composite
	Resistors	
R3001,R3002	433220004R1	RN72K2B-000JE,Chip carbon
R3004,R3019,R3042	435033304R1	RN72K1J-330JE,Chip carbon
R3012,R3013,R3014	435031034R1	RN72K1J-103JE,Chip carbon
R3016,R3017,R3018	435031034R1	RN72K1J-103JE,Chip carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R3031,R3032,R3033	435035602R1	RN72K1J-560FE,Chip carbon
R3034,R3036	435035122R1	RN72K1J-512FE,Chip carbon
R3035,R3037,R3038	435035602R1	RN72K1J-560FE,Chip carbon
R3039	435032224R1	RN72K1J-222JE,Chip carbon
R3040,R3041,R3051	435031034R1	RN72K1J-103JE,Chip carbon
R3044,R3053,R3058	435033304R1	RN72K1J-330JE,Chip carbon
R3052,R3054,R3055	435031034R1	RN72K1J-103JE,Chip carbon
R3056,R3057,R3062	435031034R1	RN72K1J-103JE,Chip carbon
R3059,R3065,R3066	435033304R1	RN72K1J-330JE,Chip carbon
R3064,R3068,R3073	435031034R1	RN72K1J-103JE,Chip carbon
R3070,R3071,R3085	435033304R1	RN72K1J-330JE,Chip carbon
R3079,R3080,R3081	435031034R1	RN72K1J-103JE,Chip carbon
R3082,R3086,R3087	435031032R1	RN72K1J-103FE,Chip carbon
R3083	435031532R1	RN72K1J-153FE,Chip carbon
R3084	435031022R1	RN72K1J-102FE,Chip carbon
R3088,R3091,R3521	435031034R1	RN72K1J-103JE,Chip carbon
R3092,R3500,R3508	435033304R1	RN72K1J-330JE,Chip carbon
R3093,R3094	435031032R1	RN72K1J-103FE,Chip carbon
R3095,R3097	435035602R1	RN72K1J-560FE,Chip carbon
R3096,R3098	435031024R1	RN72K1J-102JE,Chip carbon
R3502,R3503,R3514	435034724R1	RN72K1J-472JE,Chip carbon

R3509,R3510,R3511	435033304R1	RN72K1J-330JE,Chip carbon
R3513,R3515,R3520	435033304R1	RN72K1J-330JE,Chip carbon
R3519,R3536,R3537	435034724R1	RN72K1J-472JE,Chip carbon
R3522,R3531,R3532	435033304R1	RN72K1J-330JE,Chip carbon
R3526,R3534,R3555	435031034R1	RN72K1J-103JE,Chip carbon
R3527,R3528,R3529	435030004R1	RN72K1J-000JE,Chip carbon
R3530,R3544,R3556	435030004R1	RN72K1J-000JE,Chip carbon
R3539,R3558	435034724R1	RN72K1J-472JE,Chip carbon
R3540	435031814R1	RN72K1J-181JE,Chip carbon
R3541,R3552,R3553	435033304R1	RN72K1J-330JE,Chip carbon
R3557,R3562,R3563	435031034R1	RN72K1J-103JE,Chip carbon
R3559,R3560,R3561	435033304R1	RN72K1J-330JE,Chip carbon
R3566	435035624R1	RN72K1J-562JE,Chip carbon
R3567	435031524R1	RN72K1J-152JE,Chip carbon
R3568	435031014R1	RN72K1J-101JE,Chip carbon
R3569	435030004R1	RN72K1J-000JE,Chip carbon
R3570,R3571	435033304R1	RN72K1J-330JE,Chip carbon
R3572,R3573	435033304R1	RN72K1J-330JE,Chip carbon
R3574,R3589	435034724R1	RN72K1J-472JE,Chip carbon
R3576,R3582	435031034R1	RN72K1J-103JE,Chip carbon
	Sockets	
P3019	25053028R3	CSS5004-1062G
P3020	25053028R3	CSS5004-1062G
P3511	25052781R2	NSCT-7P2677
	Plugs	
P3503A	25056329R2	IMSA-9850B-30Y902
P3507	25055979R2	NPLG-6P932
P3509	25055979R2	NPLG-6P932
P3512	25055979R2	NPLG-6P932

MOTHER PC BOARD (NAAR-8166-1A)

CIRCUIT NO.	PART NO.	DESCRIPTION
ICs		
Q3101	W0013R300881M002	NS M32174F4VFP(TXNR1000)
Q3102	22241642R2	S-80127CNMC-JKM-T2
Q3104	22274125CR2PH	74LV125PW
Q3105	22241894R2PH	74AHCT125PW
Q3107	22278033DR2NE or 22278033DR2JR	MPC2933T or NJM2391DL1-33
Q3109	222780155R2JR	78M15HF(NJM78M15DL1A)
Q3110	222790155R2JR	79M15(NJM79M15DL1A)
Q3112	22242113R2	PCA9564PW
Q3113	22241995R3	NS MX29LV160BBTC-70
Q3114,Q3115,Q3117	22274541GR2PH	74AHCT541PW
Q3116,Q3118,Q3120	22242124R2PH or	74HC1G32GW or
Q3122,Q3124,Q3126	22241292R2	TC7S32FU
Q3119,Q3121	22274574GR2PH	74AHCT574PW
Q3123,Q3125	22274574GR2PH	74AHCT574PW
Q3127	22274138IR2PH	74AHC138PW
Q3128	22278033BR2JR	NJU7200U33
Transistors		
Q3103	2214540R2 or 2216240R2	RN2403 or DTA124EKA
Q3106	2214470R2 or 2216250R2	RN1402 or DTC114EKA
Q3129,Q3130,Q3131	2214470R2 or	RN1402 or
Q3132,Q3133,Q3134	2216250R2	DTC114EKA
Q3135,Q3136	2214470R2 or 2216250R2	RN1402 or DTC114EKA
Diodes		
D3102,D3103	223234R2 or	1SS352 or
D3105,D3106,D3107	223269R2	1SS355,Chip
D3104	224490510R2 or 224550510R2	UDZ5.1B or UDZS5.1B,Zener
D3108	224490820R2 or 224550820R2	UDZ8.2B or UDZS8.2B,Zener
D3109,D3110	223234R2 or 223269R2	1SS352 or 1SS355,Chip
Coils		
L3101,L3102	231237M022R2	NCH-1471,Choke
L3103,L3104	231237K470R2	NCH-1479,Choke
L3105,L3106	231237K470R2	NCH-1479,Choke
R3215,R3216	230955R2	BK1608HS102-T,EMI
Oscillator		
X3101	3010392R2	FCX-03-10.000MHz
Composite parts		
R3102,R3104,R3110	43474433004R1	RM4KJ330X04,Composite
R3116,R3382,R3386	43474418104R1	RM4KJ181X04,Composite
R3124,R3140,R3143	43474433004R1	RM4KJ330X04,Composite

R3144,R3148,R3160
R3147,R3180,R3326
R3164,R3173,R3177
R3182,R3187,R3191
R3197,R3201,R3207
R3211,R3219,R3239
R3309,R3325,R3329
R3327,R3374,R3375
R3333,R3339,R3343
R3347,R3353,R3357
R3369,R3370
R3390,R3394

Capacitors

C3101,C3104,C3105
C3103,C3228,C3361
C3106,C3108,C3111
C3107,C3109
C3110,C3145
C3114,C3115,C3116
C3117,C3118,C3119
C3120,C3121,C3122
C3123,C3124,C3125
C3126,C3127,LC3129
C3128,C3140
C3130,C3137,C3138
C3131,C3133,C3134
C3136
C3142,C3143,C3144
C3146,C3147,C3157
C3148,C3154
C3170,C3172,C3181
C3175

C3196,C3206,C3226
C3229,C3319
C3317,C3337,C3351
C3320,C3362
C3322
C3323
C3381

R3101,R3120,R3121
R3107
R3109,R3111,R3112
R3118,R3119,R3122
R3123,R3125,R3131
R3132
R3133,R3134,R3135
R3136,R3153,R3159
R3139,R3152,R3154
R3155,R3156,R3171
R3157,R3181
R3168,R3169,R3178
R3172,R3183,R3188
R3184
R3185,R3186,R3217
R3189,R3190,R3192
R3193,R3195,R3198
R3194,R3196
R3218,R3233
R3223,R3224,R3229

CIRCUIT NO.

R3230,R3231
R3234,R3235
R3236,R3271,R3301
R3302,R3303,R3304
R3306,R3307,R3308
R3310,R3313
R3311,R3312,R3359
R3314,R3316,R3317
R3315
R3319
R3320,R3358,R3360
R3323
R3361,R3362,R3365
R3363
R3364
R3366,R3373,R3383
R3371,R3372

43474433004R1
43474410304R1
43474433004R1
43474433004R1
43474433004R1
43474433004R1
43474433004R1
43474410304R1
43474433004R1
43474433004R1
43474433004R1
43474433004R1
43474433004R1
43474433004R1

332161040R1
356721019R2
332161040R1
356741009R2
3567A1019R2
332161040R1
332161040R1
332161040R1
332161040R1
332161040R1
356741009R2
332161040R1
394561007
394561007
332161040R1
332161040R1
342101024R1
332161040R1
3000116 or
3000089
332161040R1
342101204R1
332161040R1
342101204R1
332121045R1
342102214R1
332161040R1

Resistors

435033304R1
417342724
435031034R1
435031034R1
435031034R1
435030004R1
435036834R1
435033304R1
435031034R1
435031034R1
435031034R1
435034734R1
435033304R1
435031034R1
435031824R1
435033304R1
435031034R1
435031034R1
435032244R1
435030004R1
435031034R1

PART NO.**Resistors**

435031034R1
435030004R1
435031034R1
435030004R1
435031034R1
435032224R1
435031034R1
435033304R1
435034724R1
435031054R1
435030004R1
435031024R1
435031034R1
435036834R1
435030004R1
435031034R1
435033304R1

RM4KJ330X04,Composite
RM4KJ103X04,Composite
RM4KJ330X04,Composite
RM4KJ330X04,Composite
RM4KJ330X04,Composite
RM4KJ330X04,Composite
RM4KJ103X04,Composite
RM4KJ330X04,Composite
RM4KJ330X04,Composite
RM4KJ330X04,Composite
RM4KJ330X04,Composite

CK725F1E-104Z1,Chip ceramic
CEWX6.3V-100M,Chip elect.
CK725F1E-104Z1,Chip ceramic
CEWX16V-10M,Chip elect.
CEWX4V-100M,Chip elect.
CK725F1E-104Z1,Chip ceramic
CK725F1E-104Z1,Chip ceramic
CK725F1E-104Z1,Chip ceramic
CK725F1E-104Z1,Chip ceramic
CK725F1E-104Z1,Chip ceramic
CE04W35V-10M(VZ),Elect.
CE04W35V-10M(VZ),Elect.
CK725F1E-104Z1,Chip ceramic
CK725F1E-104Z1,Chip ceramic
CC725CH1H-102J1,Chip ceramic
CK725F1E-104Z1,Chip ceramic
EECS5R5V105 or
DX-5R5V105,Super
CK725F1E-104Z1,Chip ceramic
CC725CH1H-120J1,Chip ceramic
CK725F1E-104Z1,Chip ceramic
CC725CH1H-120J1,Chip ceramic
CK725B1C-104K1,Chip ceramic
CC725CH1H-221J1,Chip ceramic
CK725F1E-104Z1,Chip ceramic

RN72K1J-330JE,Chip carbon
R16J-2.7K,Carbon
RN72K1J-103JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-000JE,Chip carbon
RN72K1J-683JE,Chip carbon
RN72K1J-330JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-473JE,Chip carbon
RN72K1J-330JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-182JE,Chip carbon
RN72K1J-330JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-224JE,Chip carbon
RN72K1J-000JE,Chip carbon
RN72K1J-103JE,Chip carbon

DESCRIPTION

RN72K1J-103JE,Chip carbon
RN72K1J-000JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-000JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-222JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-330JE,Chip carbon
RN72K1J-472JE,Chip carbon
RN72K1J-105JE,Chip carbon
RN72K1J-000JE,Chip carbon
RN72K1J-102JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-683JE,Chip carbon
RN72K1J-000JE,Chip carbon
RN72K1J-103JE,Chip carbon
RN72K1J-330JE,Chip carbon

R3376,R3377,R3378	435035134R1	RN72K1J-513JE,Chip carbon
R3379,R3380,R3381	435036834R1	RN72K1J-683JE,Chip carbon
Sockets		
JL8002	200EE392615UL	NSAS-26P1451
P2001B,P2002B,P2204B	25052979R2	IMSA-9850S-30Y903
P2401B,P2501B,P3102B	25052979R2	IMSA-9850S-30Y903
P3107B,P3109B,P3115B	25052979R2	IMSA-9850S-30Y903
P3108B,P8000B,P8001B	25052974R2	IMSA-9850S-20Y903
P3501D	25053026R2	IMSA-9853S-28Y921
P7401B	25052982R2	IMSA-9828S-100Y900
P7501D	25053025R2	IMSA-9853S-20Y903
P8002B	25052971R2	IMSA-9850S-14Y903
Plugs		
P3105B	25056360R2	MINI-CT-40P(4-353315-0)
P3106B	25056359R2	MINI-CT-38P(3-353315-8)
P3116C	25056294	PHDT-20P(B20B-PHDSS-B)
P3117B	25055966R2	NPLG-6P919
P3118B,P3125B	25055965R2	NPLG-5P918
P3119B	25055970R2	NPLG-10P923
P3120B	25056389R2	SM12B-SRSS-TB
P3120C	25056390R2	SM13B-SRSS-TB
P3126B	25055964R2	NPLG-4P917
P3127B	25055963R2	NPLG-3P916
P3129,P3132	25056543	ISMA-9210B-1-08Z863-PT1
P3130C	25056297	PHDT-26P(B26B-PHDSS-B)
P3131	25055704	NPLG-8P660
Sheets		
A501	29095986	(MB)

DRIVER CIRCUIT PC BOARD(NAAF-8168-1A/1B)**POWER AMPLIFIER PC BOARD(NAAF-8169-1A/1B)****THERMAL DETECTOR PC BOARD(NAETC-8170-1A/1B)**

CIRCUIT NO.	PART NO.	DESCRIPTION
Transistors		
Q5000,Q5001,Q5002	2210756 or	* 2SC1775A-F or
Q5003,Q5004	2210755 or	* 2SC1775A-E or
Q5005,Q5006	2211733	* 2SC1845-E
Q5010,Q5011,Q5012	2210756 or	* 2SC1775A-F or
Q5013,Q5014	2210755 or	* 2SC1775A-E or
Q5015,Q5016	2211733	* 2SC1845-E
Q5020,Q5021,Q5022	2210756 or	2SC1775A-F or
Q5023,Q5024	2210755 or	2SC1775A-E or
Q5025,Q5026	2211733	2SC1845-E
Q5030,Q5031,Q5032	2203795 or	2SA1381-E or
Q5033,Q5034,Q5035	2203794	2SA1381-D
Q5036,Q5040,Q5041	2203795 or	2SA1381-E or
Q5042,Q5043,Q5044	2203794	2SA1381-D
Q5045,Q5046,Q5050	2203795 or	2SA1381-E or
Q5051,Q5052,Q5053	2203794	2SA1381-D
Q5054,Q5055,Q5056	2203795 or	2SA1381-E or
	2203794	2SA1381-D
Q5080,Q5081	2203805 or	2SC3503-E or
Q5082,Q5083	2203804	2SC3503-D
Q5084,Q5085	2203805 or	2SC3503-E or
Q5086	2203804	2SC3503-D
Q5601	2212445	2SK365-GR
Q5602,Q5605,Q5606	2213284 or	2SC1740S-R or
Q5607,Q5608	2212115 or	2SC2458-GR or
Q6730,Q6740	2213285 or	2SC1740S-S or
	2215864	KTC3199-GR
Q5603,Q5604	221282 or	DTC144ES or
	2213560 or	RN1204 or
	2215820	KRC104M
CIRCUIT NO.	PART NO.	DESCRIPTION
Transistors		
Q5609,Q5610	221282 or	DTC144ES or
	2213560 or	RN1204 or
	2215820	KRC104M
Q5611	2202706 or	2SD2394-F or
	2202705 or	2SD2394-E or
	2203594 or	KTC2026-Y or
	2203595	KTC2026-GR
Q6000,Q6010	2212654 or	2SC3421-Y or
	2212653	2SC3421-O
Q6020,Q6705	2213354 or	2SA933S-R or
	2212125 or	2SA1048-GR or
	2213355 or	2SA933S-S or
	2215995	KTA1267-GR
Q6030	2203805 or	2SC3503-E or
	2203804	2SC3503-D

Q6040	2203795 or 2203794	2SA1381-E or 2SA1381-D
Q6070	2214984 or 2214985	2SC2631-R or 2SC2631-S
Q6100,Q6110	2203334 or 2203333	2SA1859A-Y or 2SA1859A-O
Q6704	2211793 or 2211792 or 2215885 or 2215886	2SA992-E or 2SA992-F or KTA1268-GR or KTA1268-BL
	Diodes	
D5000,D5001,D5002	224470562	MTZJ5.6B,Zener
D5003,D5004	224470562	MTZJ5.6B,Zener
D5005,D5006	224470562	MTZJ5.6B,Zener
D5601,D5604,D5605	223163 or	1SS133 or
D5606,D5607,D5610	223205 or	1SS270A or
D5611	223222	WG713A
D5602,D5603	22380260 or 22380035	RL1N4003 or GP104003E
D5612	224471303T	MTZJ13C,Zener
D6000,D6010	223163 or 223205 or 223222	1SS133 or 1SS270A or WG713A
D6704,D6707	224470332T	MTZJ3.3B,Zener
	Cores	
L6000,L6010	5597-45502	FR
	Capacitors	
C5000,C5001,C5002	395842207	CE04W16V-22M(ROB),Elect.
C5003,C5004,C5005	395842207	CE04W16V-22M(ROB),Elect.
C5006,C5010,C5011	395842207	CE04W16V-22M(ROB),Elect.
C5012,C5013,C5014	395842207	CE04W16V-22M(ROB),Elect.
C5015,C5016	395842207	CE04W16V-22M(ROB),Elect.
C5020,C5021,C5022	374721015	ECQ-B50V-101K,Plastic film
C5023,C5024,C5025	374721015	ECQ-B50V-101K,Plastic film
C5026,C5030,C5031	374721015	ECQ-B50V-101K,Plastic film
C5032C5033,C5034	374721015	ECQ-B50V-101K,Plastic film
C5035,C5036	374721015	ECQ-B50V-101K,Plastic film
C5040,C5041,C5042	393342217	CE04W16V-220M(VX),Elect.
C5043,C5044	393342217	CE04W16V-220M(VX),Elect.
C5045,C5046	393342217	CE04W16V-220M(VX),Elect.
C5050,C5051,C5052	393381007	CE04W50V-10M(VX),Elect.
C5053,C5054	393381007	CE04W50V-10M(VX),Elect.
C5055,C5056	393381007	CE04W50V-10M(VX),Elect.
C5070,C5071,C5072	393391007	CE04W100V-10M(VX),Elect.
C5073,C5074	393391007	CE04W100V-10M(VX),Elect.
C5075,C5076	393391007	CE04W100V-10M(VX),Elect.
C5080,C5081,C5082	393372207	CE04W63V-22M(VX),Elect.
C5083,C5084	393372207	CE04W63V-22M(VX),Elect.
C5085,C5086	393372207	CE04W63V-22M(VX),Elect.
C5090,C5091,C5092	393384707	CE04W50V-47M(VX),Elect.
C5093,C5094	393384707	CE04W50V-47M(VX),Elect.
C5095,C5096	393384707	CE04W50V-47M(VX),Elect.
C5110,C5111,C5112	363150502	MI92-500V-050D,Plastic film
C5113,C5114	363150502	MI92-500V-050D,Plastic film
C5115,C5116	363150502	MI92-500V-050D,Plastic film
C5120,C5121,C5122	394691017S	CE04W100V-100M(VR),Elect.
C5123,C5124,C5125	394691017S	CE04W100V-100M(VR),Elect.
C5126,C5130,C5131	394691017S	CE04W100V-100M(VR),Elect.
C5132,C5133,C5134	394691017S	CE04W100V-100M(VR),Elect.
C5135,C5136	394691017S	CE04W100V-100M(VR),Elect.
C5602,C5603,C5604	3500217	CE04W35V-100M(VZ2.5),Elect.
C6000	374721024	ECQ-B50V-102J,Plastic film
C6010,C6020	3500215	CE04W160V-4.7M(VZ2.5),Elect.
C6030	374734734	ECQ-V100-473J,Plastic film
C6040	374722234	ECQ-B50V-223J,Plastic film
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C6520,C6530	3500216	CE04W100V-22M(VZ2.5),Elect.
C6704	3500219	CE04W50V-1M(RZ2.5),Elect.
C6705,C6706	335622230	CK45F50V-223Z,Ceramic
C6707	3500220	CE04W6.3V-100M(RZ2.5),Elect.
C6730	3500218	CE04W6.3V-220M(RZ2.5),Elect.
	Resistors	
R5000,R5001,R5002	417341024	R16J-1K,Carbon
R5003,R5004,R5005	417341024	R16J-1K,Carbon
R5006	417341024	R16J-1K,Carbon
R5010,R5011,R5012	417345634	R16J-56K,Carbon
R5013,R5014,R5015	417345634	R16J-56K,Carbon
R5016,R5250,R5251	417345634	R16J-56K,Carbon
R5020,R5021,R5022	417343314	R16J-330,Carbon

R5023,R5024,R5025	417343314	R16J-330,Carbon
R5026,R5030,R5031	417343314	R16J-330,Carbon
R5032,R5033,R5034	417343314	R16J-330,Carbon
R5035,R5036,R5040	417343314	R16J-330,Carbon
R5041,R5042,R5043	417343314	R16J-330,Carbon
R5044,R5045,R5046	417343314	R16J-330,Carbon
R5050,R5051,R5052	417345624	R16J-5.6K,Carbon
R5053,R5054,R5055	417345624	R16J-5.6K,Carbon
R5056,R6718	417345624	R16J-5.6K,Carbon
R5060,R5061,R5062	417342724	R16J-2.7K,Carbon
R5063,R5064	417342724	R16J-2.7K,Carbon
R5065,R5066	417342724	R16J-2.7K,Carbon
R5070,R5071,R5072	417341044	R16J-100K,Carbon
R5073,R5074,R5075	417341044	R16J-100K,Carbon
R5076,R5290,R5291	417341044	R16J-100K,Carbon
R5090,R5091,R5092	417341824	R16J-1.8K,Carbon
R5093,R5094	417341824	R16J-1.8K,Carbon
R5095,R5096	417341824	R16J-1.8K,Carbon
R5110,R5111,R5112	417342224	R16J-2.2K,Carbon
R5113,R5114	417342224	R16J-2.2K,Carbon
R5115,R5116	417342224	R16J-2.2K,Carbon
R5120,R5121,R5122	417342224	R16J-2.2K,Carbon
R5123,R5124	417342224	R16J-2.2K,Carbon
R5125,R5126	417342224	R16J-2.2K,Carbon
R5130,R5131,R5132	415478214	R25J-820,NF carbon
R5133,R5134,R5135	415478214	R25J-820,NF carbon
R5136,R5140,R5141	415478214	R25J-820,NF carbon
R5142,R5143,R5144	415478214	R25J-820,NF carbon
R5145,R5146,R5170	415478214	R25J-820,NF carbon
R5150,R5151,R5152	443521034	RS1/2WBJ-10K,Metal oxide
R5153,R5154	443521034	RS1/2WBJ-10K,Metal oxide
R5155,R5156	443521034	RS1/2WBJ-10K,Metal oxide
R5160,R5161,R5162	415471024	R25J-1.0K,NF carbon
R5163,R5164,R5165	415471024	R25J-1.0K,NF carbon
R5166	415471024	R25J-1.0K,NF carbon
R5171,R5172,R5173	415478214	R25J-820,NF carbon
R5174,R5175,R5176	415478214	R25J-820,NF carbon
R5180,R5181,R5182	415473304	R25J-33,NF carbon
R5183,R5184,R5185	415473304	R25J-33,NF carbon
R5186	415473304	R25J-33,NF carbon
R5210,R5211,R5212	417341834	R16J-18K,Carbon
R5213,R5214	417341834	R16J-18K,Carbon
R5215,R5216	417341834	R16J-18K,Carbon
R5220,R5221,R5222	417341834	R16J-18K,Carbon
R5223,R5224	417341834	R16J-18K,Carbon
R5225,R5226	417341834	R16J-18K,Carbon
R5230,R5231,R5232	415471504	R25J-15,NF carbon
R5233,R5234,R5235	415471504	R25J-15,NF carbon
R5236,R5240,R5241	415471504	R25J-15,NF carbon
R5242,R5243,R5244	415471504	R25J-15,NF carbon
R5245,R5246	415471504	R25J-15,NF carbon
R5252,R5253,R5254	417345634	R16J-56K,Carbon
R5255,R5256	417345634	R16J-56K,Carbon
R5260,R5261,R5262	417342744	R16J-270K,Carbon
R5263,R5264	417342744	R16J-270K,Carbon
R5265,R5266	417342744	R16J-270K,Carbon
R5280,R5281,R5282	443521034	RS1/2WBJ-10K,Metal oxide
R5283,R5284	443521034	RS1/2WBJ-10K,Metal oxide
R5285,R5286	443521034	RS1/2WBJ-10K,Metal oxide
R5292,R5293,R5294	417341044	R16J-100K,Carbon
R5295,R5296,R5603	417341044	R16J-100K,Carbon
R5300,R5301,R5302	415478204	R25J-82,NF carbon
R5303,R5304	415478204	R25J-82,NF carbon
R5305,R5306	415478204	R25J-82,NF carbon
R5330,R5331,R5332	415478204	R25J-82,NF carbon
R5333,R5334,R5335	415478204	R25J-82,NF carbon
R5336	415478204	R25J-82,NF carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R5601	417343334	R16J-33K,Carbon
R5602	417341054	R16J-1M,Carbon
R5604,R5606,R5608	417341034	R16J-10K,Carbon
R5605	417341014	R16J-100,Carbon
R5607,R5609,R5610	417342724	R16J-2.7K,Carbon
R5612	417342724	R16J-2.7K,Carbon
R5613,R5614	417341034	R16J-10K,Carbon
R5618	443521014	RS1/2WBJ-100,Metal oxide
R5619	453530474	RNU1/2WCJ-4.7,Metal
R5620,R5621	443524724	RS1/2WBJ-4.7K,Metal oxide
R5622,R5623	443524724	RS1/2WBJ-4.7K,Metal oxide

R5650	4000217	PTFL04BF471Q2N34B0 (80)
R5660	4000219	PTFL04BD471Q2N34B0 (100) <GT/DT/R/K>
	4000220	PTFL04BC471Q2N34B0 (110) <D>
R6010	417344724	R16J-4.7K,Carbon
R6020	417343324	R16J-3.3K,Carbon
R6030,R6050,R6717	417342724	R16J-2.7K,Carbon
R6040	5215387	N06HR1KBBM(RH0684C),Trimming
R6060	415471214	R25J-120,NF carbon
R6070	415475604	R25J-56,NF carbon
R6080,R6090	443521004	RS1/2WBJ-10,Metal oxide
R6110,R6705,R6707	417341034	R16J-10K,Carbon
R6120,R6130,R6140	443522204	RS1/2WBJ-22,Metal oxide
R6150,R6160	415471014	R25J-100,NF carbon
R6170,R6706,R6708	417343334	R16J-33K,Carbon
R6180,R6190	417341234	R16J-12K,Carbon
R6200	417343944	R16J-390K,Carbon
R6210,R6220,R6230	417344734	R16J-47K,Carbon
R6250,R6260	415478204	R25J-82,NF carbon
R6279,R6280	415471504	R25J-15,NF carbon
R6290,R6300	415470224	R25J-2.2,NF carbon
R6310	415471004	R25J-10,NF carbon
R6330,R6340,R6350	453532294	RNU1/2WCJ-0.22,Metal
R6360,R6560,R6570	453532294	RNU1/2WCJ-0.22,Metal
R6400,R6410,R6420	4800077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6430,R6500,R6510	4800077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6520,R6530	4800077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6600,R6610,R6620	417341024	R16J-1K,Carbon
R6630,R6640,R6650	417341024	R16J-1K,Carbon
R6704	417342244	R16J-220K,Carbon
R6714,R6715,R6740	417343334	R16J-33K,Carbon
R6730	417346824	R16J-6.8K,Carbon
	Sockets	
P6000A	2009990841BUL	NSAS-72P1254
P3118A	200C4341040UL	NSAS-10P1386
P6951A	25050460	NSCT-9P284
JL6361A	25051088	NSCT-4P875
P6952H	25052301	NSCT-18P2198
	Plugs	
P6401,P6402	25055089	NPLG-3P73
P6960A	25055147	NPLG-3P131
P5000B	25055158	NPLG-14P142
JL6361B	25055625	NPLG-4P587
P6070	25055689	NPLG-2P645
	Isolated sheet	
Q5050C,Q5051C,Q5052C	223039	TBM-5 NO.9281(TO-126)
Q5053C,Q5054C,Q5055C	223039	TBM-5 NO.9281(TO-126)
Q5056C,Q5080C,Q5081C	223039	TBM-5 NO.9281(TO-126)
Q5082C,Q5083C,Q5084C	223039	TBM-5 NO.9281(TO-126)
Q5085C,Q5086C	223039	TBM-5 NO.9281(TO-126)
	Retainers	
P5001	27141883	(AMP)
R5650A,R5660A	27141884	(PTH)
P6300	27141915	(BUS-1A)
P6400	27141916	(BUS-1B)
P6100	27141917	(BUS-2)
	Heat sinks	
Q5050A,Q5051A,Q5052A	27160517	RAD-177
Q5053A,Q5054A	27160517	RAD-177
Q5055A,Q5056A	27160517	RAD-177
Q5611A,Q6100A,Q6110A	27160538	RAD-191
	Screws	
Q5050B,Q5051B,Q5052B	82143006	3P+6FN(BC)
Q5053B,Q5054B,Q5055B	82143006	3P+6FN(BC)
Q5056B,Q5080B,Q5081B	82143006	3P+6FN(BC)
Q5082B,Q5083B,Q5084B	82143006	3P+6FN(BC)
Q5085B,Q5086B	82143006	3P+6FN(BC)
Q5611B,P6100B,Q6110B	801612	3TTB+8B(CU)

POWER AMPLIFIER PC BOARD 1 (NAAF-8173-1)
POWER AMPLIFIER PC BOARD 2 (NAAF-8174-1)
POWER AMPLIFIER PC BOARD 3 (NAAF-8175-1)
CIRCUIT NO. PART NO.

	Transistors	
Q6001,Q6002,Q6003	2212654 or	2SC3421-Y or
Q6004,Q6005,Q6006	2212653	2SC3421-O
Q6011,Q6012,Q6013	2212654 or	2SC3421-Y or
Q6014,Q6015,Q6016	2212653	2SC3421-O
Q6021,Q6022,Q6023	2213354 or	2SA933S-R or
Q6024,Q6025,Q6026	2212125 or	2SA1048-GR or

DESCRIPTION

	2213355 or 2215995	2SA933S-S or KTA1267-GR
	2203805 or 2203804	2SC3503-E or 2SC3503-D
Q6031,Q6032,Q6033	2203795 or 2203794	2SA1381-E or 2SA1381-D
Q6034,Q6035,Q6036	2214984 or 2214985	2SC2631-R or 2SC2631-S
Q6041,Q6042,Q6043	2203334	2SA1859A-Y
Q6044,Q6045,Q6046	2203334	2SA1859A-Y
Q6071,Q6072,Q6073	2203344	2SC4883A-Y
Q6074,Q6075,Q6076	2203344	2SC4883A-Y
Q6101,Q6102,Q6103	2213284 or 2212115 or 2213285 or 2215864	2SC1740S-R or 2SC2458-GR or 2SC1740S-S or KTC3199-GR
Q6104,Q6105,Q6106	Diodes	
Q6111,Q6112,Q6113	223163 or 223205 or 223222	1SS133 or 1SS270A or WG713A
Q6114,Q6115,Q6116	223163 or 223205 or 223222	1SS133 or 1SS270A or WG713A
Q6731,Q6733,Q6734		
Q6741,Q6743,Q6744		
	Cores	
D6001,D6002,D6003	5597-45502	FR
D6004,D6005,D6006	5597-45502	FR
	5597-45502	FR
D6011,D6012,D6013	5597-45502	FR
D6014,D6015,D6016		
	Capacitors	
L6001,L6002,L6003	374721024	ECQ-B50V-102J,Plastic film
L6004,L6005,L6006	374721024	ECQ-B50V-102J,Plastic film
L6011,L6012,L6013	3500215	CE04W160V-4.7M(VZ2.5),Elect.
L6014,L6015,L6016	3500215	CE04W160V-4.7M(VZ2.5),Elect.
	3500215	CE04W160V-4.7M(VZ2.5),Elect.
	3500215	CE04W160V-4.7M(VZ2.5),Elect.
C6001,C6002,C6003	374734734	ECQ-V100-473J,Plastic film
C6004,C6005,C6006	374734734	ECQ-V100-473J,Plastic film
C6011,C6012,C6013	374722234	ECQ-B50V-223J,Plastic film
C6014,C6015,C6016	374722234	ECQ-B50V-223J,Plastic film
C6021,C6022,C6023	3500216	CE04W100V-22M(VZ2.5),Elect.
C6024,C6025,C6026	3500216	CE04W100V-22M(VZ2.5),Elect.
C6031,C6032,C6033	3500218	CE04W6.3V-220M(RZ2.5),Elect.
C6034,C6035,C6036	Resistors	
C6041,C6042,C6043	417344724	R16J-4.7K,Carbon
C6044,C6045,C6046	417344724	R16J-4.7K,Carbon
C6521,C6523,C6524	417343324	R16J-3.3K,Carbon
C6531,C6533,C6534	417343324	R16J-3.3K,Carbon
C6731,C6733,C6734	417342724	R16J-2.7K,Carbon
	417342724	R16J-2.7K,Carbon
	5215387	R16J-2.7K,Carbon
	5215387	N06HR1KBBM(RH0684C),Trimming
	417342724	N06HR1KBBM(RH0684C),Trimming
	417342724	R16J-2.7K,Carbon
	415471214	R16J-2.7K,Carbon
	415471214	R25J-120,NF carbon
	415475604	R25J-120,NF carbon
	415475604	R25J-56,NF carbon
	443521004	R25J-56,NF carbon
	443521004	RS1/2WBJ-10,Meatl oxide
	443521004	RS1/2WBJ-10,Meatl oxide
	443521004	RS1/2WBJ-10,Meatl oxide
	443521004	RS1/2WBJ-10,Meatl oxide
	417341034	R16J-10K,Carbon
	417341034	R16J-10K,Carbon
	443522204	RS1/2WBJ-22,Metal oxide
	443522204	RS1/2WBJ-22,Metal oxide
	443522204	RS1/2WBJ-22,Metal oxide
	443522204	RS1/2WBJ-22,Metal oxide
	443522204	RS1/2WBJ-22,Metal oxide
	443522204	RS1/2WBJ-22,Metal oxide
	415471014	R25J-100,NF carbon
	415471014	R25J-100,NF carbon
CIRCUIT NO.	PART NO.	DESCRIPTION
	Resistors	
R6161,R6162,R6163	415471014	R25J-100,NF carbon
R6164,R6165,R6166	415471014	R25J-100,NF carbon
R6171,R6172,R6173	417343334	R16J-33K,Carbon
R6174,R6175,R6176	417343334	R16J-33K,Carbon
R6181,R6182,R6183	417341234	R16J-12K,Carbon
R6184,R6185,R6186	417341234	R16J-12K,Carbon
R6191,R6192,R6193	417341234	R16J-12K,Carbon

R6194,R6195,R6196	417341234	R16J-12K,Carbon
R6201,R6202,R6203	417343944	R16J-390K,Carbon
R6204,R6205,R6206	417343944	R16J-390K,Carbon
R6211,R6212,R6213	417344734	R16J-47K,Carbon
R6214,R6215,R6216	417344734	R16J-47K,Carbon
R6221,R6222,R6223	417344734	R16J-47K,Carbon
R6224,R6225,R6226	417344734	R16J-47K,Carbon
R6231,R6232,R6233	417344734	R16J-47K,Carbon
R6234,R6235,R6236	417344734	R16J-47K,Carbon
R6251,R6252,R6253	415478204	R25J-82,NF carbon
R6254,R6255,R6256	415478204	R25J-82,NF carbon
R6261,R6262,R6263	415478204	R25J-82,NF carbon
R6264,R6265,R6266	415478204	R25J-82,NF carbon
R6271,R6272,R6273	415471504	R25J-15,NF carbon
R6274,R6275,R6276	415471504	R25J-15,NF carbon
R6281,R6282,R6283	415471504	R25J-15,NF carbon
R6284,R6285,R6286	415471504	R25J-15,NF carbon
R6291,R6292,R6293	415470224	R25J-2.2,NF carbon
R6294,R6295,R6296	415470224	R25J-2.2,NF carbon
R6301,R6302,,R6303	415470224	R25J-2.2,NF carbon
R6304,R6305,R6306	415470224	R25J-2.2,NF carbon
R6311,R6312,R6313	415471004	R25J-10,NF carbon
R6314,R6315,R6316	415471004	R25J-10,NF carbon
R6331,R6332,R6333	453532294	RNU1/2WCJ-0.22,Metal
R6334,R6335,R6336	453532294	RNU1/2WCJ-0.22,Metal
R6341,R6342,R6343	453532294	RNU1/2WCJ-0.22,Metal
R6344,R6345,R6346	453532294	RNU1/2WCJ-0.22,Metal
R6351,R6352,R6353	453532294	RNU1/2WCJ-0.22,Metal
R6354,R6355,R6356	453532294	RNU1/2WCJ-0.22,Metal
R6361,R6362,R6363	453532294	RNU1/2WCJ-0.22,Metal
R6364,R6365,R6366	453532294	RNU1/2WCJ-0.22,Metal
R6401,R6402,R6403	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6404,R6405,R6406	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6411,R6412,R6413	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6414,R6415,R6416	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6421,R6422,R6423	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6424,R6425,R6426	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6431,R6432,R6433	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6434,R6435,R6436	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6501,R6502,R6503	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6504,R6505,R6506	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6511,R6512,R6513	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6514,R6515,R6516	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6521,R6522,R6523	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6524,R6525,R6526	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6531,R6532,R6533	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6534,R6535,R6536	48000077	RSS2WJ-0.47(BPR28CR47J),Metal plate
R6561,R6563,R6564	453532294	RNU1/2WCJ-0.22,Metal
R6571,R6573,R6574	453532294	RNU1/2WCJ-0.22,Metal
R6601,R6602,R6603	417341024	R16J-1K,Carbon
R6604,R6605,R6606	417341024	R16J-1K,Carbon
R6611,R6612,R6613	417341024	R16J-1K,Carbon
R6614,R6615,R6616	417341024	R16J-1K,Carbon
R6621,R6622,R6623	417341024	R16J-1K,Carbon
R6624,R6625,R6626	417341024	R16J-1K,Carbon
R6631,R6632,R6633	417341024	R16J-1K,Carbon
R6634,R6635,R6636	417341024	R16J-1K,Carbon
R6641,R6642,R6643	417341024	R16J-1K,Carbon
R6644,R6645,R6646	417341024	R16J-1K,Carbon
R6651,R6652,R6653	417341024	R16J-1K,Carbon
R6654,R6655,R6656	417341024	R16J-1K,Carbon
R6731,R6733,R6734	417346824	R16J-6.8K,Carbon
R6741,R6743,R6744	417343334	R16J-33K,Carbon
	Sockets	
P6951B,P6951D,P6951E	25050460	NSCT-9P284
P6952C,P6952F,P6952G	25052299	NSCT-16P2196
	Plugs	
JL6361B	25055625	NPLG-4P587
P6071,P6072,P6073	25055689	NPLG-2P645
P6074,P6075,P6076	25055689	NPLG-2P645
	Retainers	
P6101,P6103,P6104	27141917	(BUS-2)
P6102,P6105,P6106	27141918	(BUS-3)
CIRCUIT NO.	PART NO.	DESCRIPTION
	Retainers	
P6301,P6302,P6303	27141914	(BUS-1)
P6401,P6402,P6403	27141914	(BUS-1)
	Heat sinks	
Q6101A,Q6102A,Q6103A	27160538	RAD-191
Q6104A,Q6105A,Q6106A	27160538	RAD-191

Q6111A,Q6112A,Q6113A	27160538	RAD-191
Q6114A,Q6115A,Q6116A	27160538	RAD-191
Screws		
Q6101B,Q6102B,Q6103B	801612	3TTB+8B(CU)
Q6104B,Q6105B,Q6106B	801612	3TTB+8B(CU)
Q6111B,Q6112B,Q6113B	801612	3TTB+8B(CU)
Q6114B,Q6115B,Q6116B	801612	3TTB+8B(CU)

CONNECTOR PC BOARD 1 FOR POWER AMPLIFIER (NAETC-8177-1)**CONNECTOR PC BOARD 2 FOR POWER AMPLIFIER (NAETC-8178-1)****POWER TRANSISTOR PC BOARD(NAETC-8179-1)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	Plugs	
P5601I	25056246	5569RDF-8P(39-29-1088)
P6001I	25056262	PHDS-24P(S24B-PHDSS-B)
P6050,P6080	25056268	IMSA-9202B-1-5P-T
P6351A	25055099	NPLG-2P83
P6951I,P6951J	25055106	NPLG-9P90
P6952I	25056023	NPLG-18P0973
P6952J	25056021	NPLG-16P0971
	Clamp	
P5801	260226	CP-2S

BIAS SELECTOR PC BOARD (NAPS-8181-1A/1B/1D/1E/1H)**REGULATOR CIRCUIT PC BOARD(NAPS-8182-1A/1B/1D/1E/1H)****STANDBY TRANSFORMER PC BOARD(NAPS-8183-1A/1B/1D/1E/1H)****SPEAKER TERMINAL PC BOARD (NAETC-8184-1A/1B/1D/1E/1H)****REGULATOR PC BOARD(NAPS-8185-1A/1B/1D/1E/1H)****POWER TRANSISTOR PC BOARD(NAETC-8200-1A/1B/1D/1E/1H)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q9321,Q9331	222780053JRC	78L05(NJM78L05A)
Q9341,Q9345	22242097	NJM317F
Q9361	222780565JRC	78M56(NJM78M56FA)
Q9381	222780055	78M05HF
Q9391	22278033F	MPC29L33J
	Transistors	
Q6901,Q6911,Q6963	2213284	2SC1740S-R
	2212115 or	2SC2458-GR or
	2213285 or	2SC1740S-S or
	2215864 or	KTC3199-GR or
Q9362	2212855	2SB1068-U
Q9365	2214230	RN1202
	Diodes	
D6600,D6601,D6602	223163 or	1SS133 or
D6603,D6610,D6611	223205 or	1SS270A or
D6612,D6613	223222	WG713A
D6901,D6902	22380260 or	RL1N4003 or
D9351,D9361,D9362	22380032 or	1SR139-100 or
	22380035	GP104003E
D6903,D6904	22380344	SF20LC30
D6905,D6906	22380344	SF20LC30
D6907,D6908	22380345	LN25XB60
D6910,D6911	223163 or	1SS133 or
D9371,D9372	223205 or	1SS270A or
	223222	WG713A
	Coils	
L6800,L6801,L6802	231176S	S-1.3C
L6803,L6804	231176S	S-1.3C
L6805,L6806	231176S	S-1.3C
	Capacitors	
C6600,C6601,C6602	374721034	ECQ-B50V-103J,Plastic film
C6603,C6610,C6611	374721034	ECQ-B50V-103J,Plastic film
C6612,C6613,C6830	374721034	ECQ-B50V-103J,Plastic film
C6831,C6832,C6833	374721034	ECQ-B50V-103J,Plastic film
C6834,C6835,C6836	374721034	ECQ-B50V-103J,Plastic film
C6840,C6841,C6842	374721024	ECQ-B50V-102J,Plastic film
C6843,C6844	374721024	ECQ-B50V-102J,Plastic film
C6845,C6846	374721024	ECQ-B50V-102J,Plastic film
C6850,C6851,C6852	374721024	ECQ-B50V-102J,Plastic film
C6853,C6854	374721024	ECQ-B50V-102J,Plastic film
C6855,C6856	374721024	ECQ-B50V-102J,Plastic film
C6860,C6861,C6862	374721024	ECQ-B50V-102J,Plastic film
C6863,C6864	374721024	ECQ-B50V-102J,Plastic film
C6865,C6866	374721024	ECQ-B50V-102J,Plastic film
CIRCUIT NO.	PART NO.	DESCRIPTION
	Capacitors	
C6870,C6871,C6872	374721034	ECQ-B50V-103J,Plastic film
C6873,C6874	374721034	ECQ-B50V-103J,Plastic film
C6875,C6876	374721034	ECQ-B50V-103J,Plastic film

C6903	374722234	ECQ-B50V-223J,Plastic film
C6910,C6911	374721034	ECQ-B50V-103J,Plastic film
C6912,C6913	374733344	ECQ-V100-334J,Plastic film
C6921	3700083S	ECQE250V-334J,Plastic film
C6922,C6923	374733344	ECQ-V100-334J,Plastic film
C9301,C9302	394561007	CE04W35V-10M(VZ),Elect.
C9311,C9312	394561007	CE04W35V-10M(VZ),Elect.
C9321,C9322	394561007	CE04W35V-10M(VZ),Elect.
C9331,C9332	394561007	CE04W35V-10M(VZ),Elect.
C9341,C9342,C9345	394561007	CE04W35V-10M(VZ),Elect.
C9351,C9361	394651027S	CE04W25V-1000M(VR),Elect.
C9352,C9362	394561007	CE04W35V-10M(VZ),Elect.
C9381,C9382	394561007	CE04W35V-10M(VZ),Elect.
C9391	394561007	CE04W35V-10M(VZ),Elect.
C9392	394531017	CE04W10V-100M(VZ),Elect.
	Resistors	
R6620,R6830,R6831	453530824	RNU1/2WCJ-8.2,Metal
R6800,R6801,R6802	417342204	R16J-22,Carbon
R6803,R6804	417342204	R16J-22,Carbon
R6805,R6806	417342204	R16J-22,Carbon
R6810,R6811,R6812	417342204	R16J-22,Carbon
R6813,R6814	417342204	R16J-22,Carbon
R6815,R6816	417342204	R16J-22,Carbon
R6832,R6833,R6834	453530824	RNU1/2WCJ-8.2,Metal
R6835,R6836,R6920	453530824	RNU1/2WCJ-8.2,Metal
R6901,R6902	417344724	R16J-4.7K,Carbon
R6911,R6912	417344724	R16J-4.7K,Carbon
R9301	453636894	RNU1WCJ-0.68,Metal
R9311	453630184	RNU1WCJ-1.8,Metal
R9321	453534794	RNU1/2WCJ-0.47,Metal
R9323,R9333	415473304	R25J-33,NF carbon
R9343,R9345	417343904	R16J-39,Carbon
R9344,R9346	417341214	R16J-120,Carbon
R9351	453530224	RNU1/2WCJ-2.2,Metal
R9361	453530104	RNU1/2WCJ-1,Metal
R9362,R9364	417343324	R16J-3.3K,Carbon
R9363	417342234	R16J-22K,Carbon
R9371	417341024	R16J-1K,Carbon
R9372	417342714	R16J-270,Carbon
R9382,R9383	441623304F	RS1WBJ-33,Metal oxide
R9391,R9392	441623394F	RS1WBJ-0.33,Metal oxide <D>
R9392	441621504F	RS1WBJ-15,Metal oxide <DT/GT/R/K>
R9393	415473304	R25J-33,NF carbon <D>
R9393	415475604	R25J-56,NF carbon <DT/GT/R/K>
	Relays	
RL6600,RL6601,RL6602	25065590	NRL-2P8A-DC24-144
RL6603,RL6604	25065590	NRL-2P8A-DC24-144
RL6605,RL6606	25065590	NRL-2P8A-DC24-144
RL6610,RL6611,RL6612	25065590	NRL-2P8A-DC24-144
RL6613,RL6614	25065590	NRL-2P8A-DC24-144
RL6615,RL6616	25065590	NRL-2P8A-DC24-144
RL6901,RL6902	25065516	NRL-1P10A-DC12-097
RL6903,RL6904	25065516	NRL-1P10A-DC12-097
RL6911,RL6912	25065516	NRL-1P10A-DC12-097
RL6913,RL6914	25065516	NRL-1P10A-DC12-097
	Fuse	
R9331	252181	! 3.5A-UL/T-251
	Fuse holders	
F6911A,F6911B	250113	! SN5051
F6913A,F6913B	250113	! SN5051
F6921A,F6921B	250113	! SN5051
F6923A,F6923B	250113	! SN5051
	Terminals	
P6801	25060365	NTM-4PDMN296 <D>
	25060366	NTM-4PDMN297 <GT/DT/R/K>
P6802	25060369	NTM-8PDMN300 <D>
	25060370	NTM-8PDMN301 <DT/GT/R/K>
P6803	25060367	NTM-8PDMN298 <D>
	25060368	NTM-8PDMN299 <DT/GT/R/K>
P6804	25060371	NTM-8PDMN302 <D>
	25060372	NTM-8PDMN303 <DT/PT/R/K>
P9511,P9512	25060301	NTM-1P232(M1700)
	AC outlet	
P9011	25051572	! NSCT-2P1359 <GT>
CIRCUIT NO.	PART NO.	DESCRIPTION
JL9301A,JL9301B	Sockets 25051107	NSCT-3P894

P3117A	200C4391254UL	NSAS-12P1385
P3119A	200C4392026UL	NSAS-20P1328
P3130A	2009990877UL	NSAS-60P1336
P4864	200C4192612UL	NSAS-26P1384
P6840	2009990842BUL	NSAS-12P1258
P6841	2009990843BUL	NSAS-14P1259
P9003	2009990862UL	NSAS-2P1305
P9005	2009990861UL	NSAS-3P1304
	Plugs	
P6940	25056177	NPLG-8P1116
P9502C	25056261	PHDS-22P(S22B-PHDSS-B)
	Labels	
F6911C,F6921C	29363792	T20AL250V <GT/K>
	Heat sinks	
D6903A,D6907A	27160541	RAD-194
Q9341A	27160540	RAD-193
	Screws	
D6903B,D6904A,D6905A	801612	3TTB+8B(CU)
D6906A,D6907B,D6908A	801612	3TTB+8B(CU)
Q9341B,Q9361A	801612	3TTB+8B(CU)
P9511A,P9512A	801612	3TTB+8B(CU)
	Retainers	
P6981	27141851	BBL60
P6982,P6984	27141867	BBL40
P6983,P6985	27141866	BBL25

POWER SUPPLY CIRCUIT PC BOARD (NAPS-8186-1A/1B/1D)**SECONDARY CIRCUIT PC BOARD (NAPS-8187-1A/1B/1D)****CAPACITOR PC BOARD (NAETC-8188-1A/1B/1D)****POWER SWITCH PC BOARD (NASW-8189-1B/1D)****POWER TRANSISTOR PC BOARD(NAETC-8200-1A/1B/1D)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q5701	22241537R2	MPD4721GS
Q5721	22278033F	MPC29L33J
Q9401	222780094JRC	7809FA(NJM7809FA)
Q9431,Q9441	222780053JRC	78L05(NJM78L05A)
	Transistors	
Q5751,Q5752,Q5753	2212855	2SB1068-U
Q5754,Q5755	2212855	2SB1068-U
Q5761,Q5762,Q5763	2214470R2 or	RN1402 or
Q5764,Q5765	2216190R2	KRC102S
Q5771,Q5772,Q5773	2214470R2 or	RN1402 or
Q5781,Q5782,Q5783	2216190R2	KRC102S
Q9201,Q9211	2214470R2 or	RN1402 or
Q9403,Q9413	2216190R2	KRC102S
Q9202,Q9212,Q9363	2213145R2 or	2SC2712-GR or
Q9502	2216175R2	KTC3875-GR
Q9402,Q9412	2212855	2SB1068-U
Q9404	2202304 or	2SC4512-Y or
	2202305	2SC4512-P
Q9422	2215024	2SD1468S-R
Q9423	2214530R2 or	RN2402 or
	2216220R2	KRA102S
Q9501	2211644	2SA965-Y
	Photo couplers	
Q5791,Q5792,Q5793	24120080	PC817X
	Diodes	
D9101,D9102	22380260 or	RL1N4003 or
D9103,D9104	22380032 or	1SR139-100 or
D9401,D9402	22380035	GP104003E
D9201,D9211	223234R2 or	1SS352 or
D9421,D9422,D9506	223269R2	1SS355,Chip
D9403	224551200R2	UDZS12B,Zener
D9502	22380285F or	RS403M or
	22380022F or	RBV402 or
	22380271F	D3SBA20
D9503,D9504	22380260 or	RL1N4003 or
	22380032 or	1SR139-100 or
	22380035	GP104003E
D9505	224552700R2	UDZS27B,Zener
	Coil	
L5701	230948R2	BLM21A102F,Choke
	Capacitors	
C5701,C5702	394681007	CE04W50V-10M(VR),Elect.
C5703,C5704	394681007	CE04W50V-10M(VR),Elect.
C5705	394621017	CE04W6.3V-100M(VR),Elect.
C5706,C5707	332161040R1	CK725F1E-104Z1,Chip ceramic
C5721	394641017	CE04W16V-100M(VR),Elect.
CIRCUIT NO.	PART NO.	DESCRIPTION

	Capacitors	
C5722	394661007	CE04W35V-10M(VR),Elect.
C5751,C5752,C5753	394644707	CE04W16V-47M(VR),Elect.
C5754,C5755	394644707	CE04W16V-47M(VR),Elect.
C5771,C5772,C5773	394621017	CE04W6.3V-100M(VR),Elect.
C5781,C5782,C5783	374722234	ECQ-B50V-223J,Plastic film
C9001	3500196S or	! RE275V-103M or
	3500202S	! MKP R46 103M,IS
C9002	3300030	! DE1307E472M-KH,IS <DT/GT/R/K>
C9004	3800041S	! MKP R46 104M
C9101,C9104	332112235R1	CK725B1E-223K1,Chip ceramic
C9103	394654717	CE04W25V-470M(VR),Elect.
C9401,C9402	394561007	CE04W35V-10M(VZ),Elect.
C9403	394654727S	CE04W25V-4700M(VR),Elect.
C9404	394664717	CE04W35V-470M(VR),Elect.
C9405,C9511	332101035R1	CK725B1H-103K1,Chip ceramic
C9406,C9512	332112235R1	CK725B1E-223K1,Chip ceramic
C9411,C9412	394561007	CE04W35V-10M(VZ),Elect.
C9421,C9422	394561007	CE04W35V-10M(VZ),Elect.
C9431,C9432	394561007	CE04W35V-10M(VZ),Elect.
C9441,C9442	394561007	CE04W35V-10M(VZ),Elect.
C9501,C9502	374723344	ECQ-V50V-334J,Plastic film
C9503,C9504	374723344	ECQ-V50V-334J,Plastic film
C9505	3500226S	CE04W16V-1500M(VK),Elect.
C9506	393344727S	CE04W16V-4700M(VX),Elect.
C9507	393364727S	CE04W35V-4700M(VX),Elect.
C9508	393362227S	CE04W35V-2200M(VX),Elect.
C9509	394682217	CE04W50V-220M(VR),Elect.
C9510	394672217	CE04W63V-220M(VR),Elect.
C9513	374722234	ECQ-B50V-223J,Plastic film
C9521,C9522,C9523	374722234	ECQ-B50V-223J,Plastic film
	Resistors	
R5701,R5702	435033314R1	RN72K1J-331JE,Chip carbon
R5703,R5704	435033314R1	RN72K1J-331JE,Chip carbon
R5711	435032214R1	RN72K1J-221JE,Chip carbon
R5721	4000227 or	FRX040-60 or
	4000223	RXE040
R5722,R5723,R5724	4000226 or	FRX020-60 or
R5725	4000228	RXE020
R5731,R5732,R5733	435032224R1	RN72K1J-222JE,Chip carbon
R5734,R5735	435032224R1	RN72K1J-222JE,Chip carbon
R5741,R5742,R5743	435031024R1	RN72K1J-102JE,Chip carbon
R5744,R5745	435031024R1	RN72K1J-102JE,Chip carbon
R5751,R5752,R5753	435033324R1	RN72K1J-332JE,Chip carbon
R5761,R5762,R5763	435031034R1	RN72K1J-103JE,Chip carbon
R5771,R5772,R5773	435031034R1	RN72K1J-103JE,Chip carbon
R5781,R5782,R5783	435031014R1	RN72K1J-101JE,Chip carbon
R9001,R9002,R9003	4000147	S5R114 <GT/R/K>
	4000148	M3R014C <D/DT>
R9004	4000147	S5R114 <GT/R/K>
R9101	453536894	RNU1/2WCJ-0.68,Metal
R9102	453530474	RNU1/2WCJ-4.7,Metal
R9103	435034724R1	RN72K1J-472JE,Chip carbon
R9202,R9212	435031034R1	RN72K1J-103JE,Chip carbon
R9211	435031024R1	RN72K1J-102JE,Chip carbon
R9401	453530274	RNU1/2WCJ-2.7,Metal
R9403,R9404,R9411	453534794	RNU1/2WCJ-0.47,Metal
R9405	435031224R1	RN72K1J-122JE,Chip carbon
R9407,R9505	435033334R1	RN72K1J-333JE,Chip carbon
R9408,R9413,R9423	435031024R1	RN72K1J-102JE,Chip carbon
R9409,R9414,R9424	435034734R1	RN72K1J-473JE,Chip carbon
R9421	453538294	RNU1/2WCJ-0.82,Metal
R9432	452538294F	RNU1/2WCJ-0.82,Metal
R9433,R9443	415473304	R25J-33,NF carbon
R9441	252181	3.5A-UL/T-251
R9501	453530224	RNU1/2WCJ-2.2,Metal
R9502	443522204	RS1/2WBJ-22,Metal oxide
R9503	435031534R1	RN72K1J-153JE,Chip carbon
R9507	453530824	RNU1/2WCJ-8.2,Metal
R9508	435031024R1	RN72K1J-102JE,Chip carbon
	Relays	
RL9001,RL9002	25065584	! NRL-1P10A-DC12-140
RL9003,RL9004	25065584	! NRL-1P10A-DC12-140
RL9005	25065583	! NRL-1P5A-DC12-139
RL9501	25065659	NRL-2P2A-DC24-174
	Switch	
S9001	25035636	! NPS-111-L590P <DT/GT/R/K>
	Terminals	
P5751,P5752,P5753	25045647	HSJ1002-01-1020
	AC inlet	

P9001A	25055960	!	NPLG-2P913
CIRCUIT NO.	PART NO.		DESCRIPTION
	Fuse holders		
F9001A,F9001B	25052133	!	NSCT-1P2031 <GT/R/K>
F9001A,F9001B	250113	!	SN5051 <D/DT>
F9002A,F9002B	25052133	!	NSCT-1P2031
F9501A,F9501B	25052133	!	NSCT-1P2031
F9502A,F9502B	25052133	!	NSCT-1P2031
F9503A,F9503B	25052133	!	NSCT-1P2031
F9504A,F9504B	25052133	!	NSCT-1P2031
	Labels		
F9001C	29362800		T8AL250V <GT/R/K>
F9002C,F9503C	29361747		T2.5AL250V <GT/R/K>
F9501C	29362027		6.3A/125V <DT>
F9501C	29361681		T6.3AL/250V <GT/R/K>
	Sockets		
P3116	2009990855UL		NSAS-40P1298
P5701	25052379		NSCT-9P2277
P6960	200C4190612UL		NSAS-6P1330
P9004	2009990863UL		NSAS-2P1306 <DT/GT/R/K>
P9502	2009990856UL		NSAS-44P1299
P9503	200EE390615		NSAS-6P0795
	Plugs		
P3120A	25056297		PHDT-26P(B26B-PHDSS-B)
P9002	25055676	!	NPLG-2P632
P9003C	25056455		S02B-VT
P9004C	25055675		NPLG-2P631 <DT/GT/R/K>
P9005D	25055177		NPLG-5P161
P9501	25055180		NPLG-8P164
	Clamps		
P9101,P9102	260226		CP-2S

CONNECTOR PC BOARD 3 FOR POWER AMPLIFIER (NAETC-8177-2)**CONNECTOR PC BOARD 4 FOR POWER AMPLIFIER (NAETC-8178-2)**

CIRCUIT NO.	PART NO.	DESCRIPTION
	Plugs	
P5601K	25056246	5569RDF-8P(39-29-1088)
P6001K	25056262	PHDS-24P(S24B-PHDSS-B)
P6351A	25055099	NPLG-2P83
P6951K,P6951L	25055106	NPLG-9P90
P6952K,P6952L	25056021	NPLG-16P0971
	Clamp	
P5801	260226	CP-2S

EXPLODED VIEW-PARTS LIST

NOTE: THE COMPONENTS IDENTIFIED BY MARK !
ARE CRITICAL FOR RISK OF FIRE AND
ELECTRIC SHOCK. REPLACE ONLY WITH
PART NUMBER SPECIFIED.

CAUTION: Replacement for transistor of mark *, if necessary
must be made from the same beta group (hFE) as
the original type.

NOTE: <D>:120V model only <GT>:Asian model for 220V
<DT>:Asian model for 120V
<R>:Chinese model only <K>:Korean model only
:Black model only <S>:Silver model only
<G>:Golden model only

REF. NO.	PART NO.	DESCRIPTION
A001	27130947A	Bracket L
A002	27123220A	Rear panel <D/DT>
	27123223A	Rear panel <K>
	27123224A	Rear panel <GT>
	27123225A	Rear panel <R>
A003	27191143	Holder, outlet <R>
A004	28175298	Isolated plate AC <K>
A005	801620A	Screw, plate
A006	27130948A	Bracket R
A007	27262713A	Plate, slot A <D/GT/DT/K>
	27262730	Plate, slot A2 <R>
A008	28141626	T4*30*12.5,Cushion
A009	28175308	Isolated plate B2
A010	27262714	Plate, slot B
A011	801612	3TTB+8B(CU),Self-tapping screw
A013	27262715A	Plate, slot C/D
A014	801624	3TTB+10B(BC),Self-tapping screw with stopper
A015	27262716	Plate, slot E
A016	82143005	3P+5FN(BC),Pan head screw
A017	833450102	5STP+10BQ(BC),Special screw
A018	27262718	Plate, slot F/G
A019	27190503A	KGLS-8RT,Holder
A020	82141606	M1.6*6(BC), Machine screw
A021	27262719	Plate, slot H/I
A022	801612	3TTB+8B(CU),Self-tapping screw
A023	27130939	Bracket H
A024	27262720	Plate, slot J <GT/DT/R/K>
	27262722	Plate, slot J3 <D>
A026	27262723	Plate slot K
A028	27262725A	Plate, slot L
A030	838430088	3TTB+8B(BC),Self-tapping screw
A031	27141911	Retainer
A032	27270439	Spacer
A033	27130933	Bracket, rail A
A034	29110082	8mm, Tape cloth
A035	27130935	Bracket, Bottom
A036	28141592	Cushion MB
A037	27190266	KGLS-12RT,Holder
A038	838430088	3TTB+8B(BC),Self-tapping screw
A039	29110083	16mm, Tape cloth
A040	27190965	Holder
A041	801612	3TTB+8B(CU),Self-tapping screw
A042	801612	3TTB+8B(CU),Self-tapping screw
A043	27191156	KGLS-5RT,Holder
A044	27160543A	Heat sink M
A045	838430088	3TTB+8B(BC),Self-tapping screw
A046	801612	3TTB+8B(CU),Self-tapping screw
A047	27270441	Spacer PC
A048	27141903	Retainer H
A049	27262706	Plate PHT

A050 REF. NO.	27270438 PART NO.	t0.5xφ8xφ3.2,Spacer DESCRIPTION
A051	28175302	Isolated plate H
A052	801612	3TTB+8B(CU),Self-tapping screw
A053	27150491	Shield plate PT
A054	801606	3SMH10W.SW+15B(CU),Special screw
A055	801433	3SMS8W.SW+14B(BC),Special screw
A056	27130940A	Bracket C
A057	27160544	Heat sink S
A058	27191224	KGPS-5RF,Holder
A059	27191156	KGLS-5RT,Holder
A061	27190524	KGLS-14RT,Holder
A062	28141624	T3*10*10,Cushion
A063	27130937	Bracket UL
A064	27130938	Bracket UR
A065	838440089	4TTB+8C(BC),self-tapping screw
A066	27130932	Bracket PT
A067	801612	3TTB+8B(CU),Self-tapping screw
A069	29363379-2	Label PT
A070	830440109	4TTC+10C(BC),Self-tapping screw
A071	27111343A	Front bracket
A073	838440089	4TTB+8C(BC),self-tapping screw
A075	27191156	KGLS-5RT,Holder
A076	801433	3SMS8W.SW+14B(BC)
A078	27130936	Bracket U
A079	27130934	Bracket, Rail B
A081	801612	3TTB+8B(CU),Self-tapping screw
A084	27191221	Holder CH
A086	801612	3TTB+8B(CU),Self-tapping screw
A087	27225156	Shield case A
A088	27225157	Shield case B
A091	28175305	Isolated plate T2
A092	28175307	Isolated plate T3
A093	880009	NRP-345,Plastic rivet
A094	25060151	Terminal, ground
A095	87643010	W3*10F(BC),Washer
A098	830030088	3TTC+8B(Cu),Screw
A099	27268094	Guide, Selector
	27268095	Guide, Selector <S>
	27268096	Guide, Selector <G>
A100	82143005	3P+5FN(BC),Pan head screw
A101	24847051	15*5*3,Cushion
A102	28198981	Facet, Selector
A103	27141974	Retainer EC
A104	838430088	3TTB+8B(BC),Self-tapping screw
A107	28180162C	Hinge L
	28180163C	Hinge L <S>
	28180164C	Hinge L <G>
A108	28180166C	Hinge R
	28180167C	Hinge R <S>
	28180168C	Hinge R <G>
A109	28192021	Clear plate
	28192022	Clear plate <S/G>
A110	27268108A	Guide, lever
A111	28184890	Cover, hinge
A112	801612	3TTB+8B(CU),Self-tapping screw
A113	801612	3TTB+8B(CU),Self-tapping screw
A114	27141910	Retainer, Encoder
A115	28148569A	Door <S>
	28148570	Door <G>
	28148589	Door <GT>
	28148568A	Door <D>
A116	27268097	Guide, door
	27268098	Guide, door <S>

	27268099	Guide, door <G>
	28141625	Cushion, Door
A117	PART NO.	DESCRIPTION
A118	838430088	3TTB+8B(BC),Self-tapping screw
A119	82143005	3P+5FN(BC),Pan head screw
A120	28326194B	Knob, Encoder
	28326195B	Knob, Encoder <S>
	28326196B	Knob, Encoder <G>
A121	838120088	2TTB+8B,Machine screw
A122	82143005	3P+5FN(BC),Pan head screw
A124	838426068	2.6TTB+6B(BC),Screw
A125	27262708A	Plate, Door
	27262709A	Plate, Door <S>
	27262710A	Plate, Door <G>
A126	27180590	Spring B
A127	27141940	Retainer, Door
A128	29095963	Sheet, Bracket
A131	801612	3TTB+8B(CU),Self-tapping screw
A135	801612	3TTB+8B(CU),Self-tapping screw
A136	27191223	Holder, LED
A137	801612	3TTB+8B(CU),Self-tapping screw
A138	28185447A	Side panel L
	28185448A	Side panel L <S>
	28185449A	Side panel L <G>
A139	28185450A	Side panel R
	28185451A	Side panel R <S>
	28185452A	Side panel R <G>
A140	28184891A	Top cover
	28184892B	Top cover <S>
	28184893A	Top cover <G>
A141	801616A	RCTK4*10(BC),Decorative screw
	801617A	RCTK4*10(NI),Decorative screw <S/G>
A142	27170335	Bottom panel
A143	801525	3TTB+8B(BC),Self-tapping screw with stopper
A144	838430068	3TTB+6B(BC),Self-tapping screw
A145	82143005	3P+5FN(BC), Pan head screw
A146	28141569	Cushion, leg B
A147	801613	3*8,Flat head screw
A149	838140127	4TTB+12S,Self-tapping screw
A150	28141590	Cushion, leg
A153	28141627	T0.4*10*110,Cushion
A154	28141628	T0.4*10*180,Cushion
A155	28141409A	9*35*5,Cushion
A156	28326179A	Knob, Selector
	28326180A	Knob, Selector <S>
	28326181A	Knob, Selector <G>
A157	27212611C	Front panel <D>
	27212612C	Front panel <S>
	27212615C	Front panel <G>
	27212666B	Front panel <DT>
A161	28326182A	Knob, Selector 1
	28326183A	Knob, Selector 1 <S>
	28326184A	Knob, Selector 1 <G>
A162	28135295	Badge
A166	28326189A	Knob, Open
	28326190A	Knob, Open <S>
	28326191A	Knob, Open <G>
A167	27175401A	Leg
A168	28125412B	End cap L
	28125414B	End cap L <S>
	28125416B	End cap L <G>
A171	27268103	Guide, Standby
	27268104	Guide, Standby <S>
	27268105	Guide, Standby <G>

A172	28125413B	End cap R
	28125415B	End cap R <S>
	28125417B	End cap R <G>
REF. NO.	PART NO.	DESCRIPTION
A179	29110183	W12*90,Tape, copper
A180	29110182	W12*50,Tape, copper
A181	28326169C	Knob, Volume
	28326170C	Knob, Volume <S>
	28326171C	Knob, Volume <G>
A182	27268109A	Guide, Open
	27268110A	Guide, Open <S>
	27268111A	Guide, Open <G>
A184	801612	3TTB+8B(CU),Self-tapping screw
A187	27215368	Decorative frame
	27215369	Decorative frame <S>
	27215370	Decorative frame <G>
A190	28198908	Facet
A192	82143005	3P+5FN(BC), Pan head screw
A196	801613	3*8,Flat head screw
A202	28326166A	Knob, Power <GT>
	28326168A	Knob, Power <G>
A205	27255004	CS-1U,Clip
A208	82143005	3P+5FN(BC), Pan head screw
A209	27268112	Guide, Volume
	27268113	Guide, Volume <S>
	27268114	Guide, Volume <G>
A212	82143005	3P+5FN(BC), Pan head screw
A214	27270450	Spacer, shaft
A223	27255004	CS-1U,Clip
A251	260208	Wire tie
A301	29363796	Label, Caution
	29363797	Label, Caution <S>
	29363798	Label, Caution <G>
A302	29363194	Label, Hook-up <D>
A303	29363774	Label, Cover
	29363775	Label, Cover <S>
	29363776	Label, Cover <G>
A304	29363770	Label, Specifications <D>
	29363771	Label, Specifications <S>
	29363780	Label, Specifications<G> <GT/K>
	29363781	Label, Specifications <DT>
	29363782	Label, Specifications <R>
	29363837	Label, Specifications <GT>
A305	29363800	Label, Flash
	29363801	Label, Flash <S>
	29363802	Label, Flash <G>
A306	29363682	Label, door
A307	29363264	Label MAC
A330	25060401	(221LTS00500G),Terminal
C6901,C6902	3504397	CE62W80V-33000M,Capacitor, Elect.
D9501	22380337	D10XB60H,Diode
E9001,E9002	24502318A	9A0924F403,Fan
F6911,F6913	252304	! 20A-UL-250V,Fuse
F6921,F6923	252304	! 20A-UL-250V,Fuse
F9001	252099 or	! 8A-EAK or
	252306	! 8A-TL250V,Fuse <GT/R/K>
	252303 or	! 15A-TUL-250V or
	252197	! 15A-UL/T-314,Fuse <D/DT>
F9002	252164 or	! 5A-UL/T-237 or
	252075 or	! 2.5A-SE-EAK or
	252258	! 5A-T/UL-ST2,Fuse <D/DT>
	252241 or	! 2.5A-SE-TL250V or
	252275	! 2.5A-SE-TL250V,Fuse <GT/R/K>
F9501	252198 or	! 8A-UL or

	252261	!	8A-T/UL-ST2,Fuse <D>
	252079 or	!	6.3A-SE-EAK or
	252245 or	!	6.3A-SE-TL250V or
	252279	!	6.3A-SE-TL250V,Fuse <GT/DT/R/K>
REF. NO.	PART NO.		DESCRIPTION
F9502	252198 or	!	8A-UL or
	252261	!	8A-T/UL-ST2,Fuse <D>
	252079 or	!	6.3A-SE-EAK or
	252245 or	!	6.3A-SE-TL250V or
	252279	!	6.3A-SE-TL250V,Fuse <GT/DT/R/K>
F9503,F9504	252160 or	!	2.5A-UL/T-237 or
	252254	!	2.5A-T/UL-ST2,Fuse <D/DT>
	252075 or	!	2.5A-SE-EAK or
	252241 or	!	2.5A-SE-TL250V or
	252275	!	2.5A-SE-TL250V,Fuse <GT/R/K>
P101	2047150312		NCFC7-150312,Flat cable
P3105	2009990867UL		NSAS-80P1310,Socket
P3106	2009990868UL		NSAS-76P1311,Socket
P3120	2009990871AUL		NSAS-50P1318,Socket
P6901A	27141898		Retainer BUS-G
P6901B,P6901C	27141899		Retainer BUS-B for U163
P7501	2045206022		NCFC5-206022,Flat cable
P7506	20033281065UL		NSAS-10P1381,Socket
P9011	25052665	!	NSCT-2P2561,AC outlet <K>
Q6050,Q6051,Q6052	2203684 or	*	MN150S-Y or
Q6053,Q6054,Q6055	2203683 or	*	MN150S-O or
Q6056	2203686	*	MN150S-P,Transistor
Q6050A	27301328		BFG-20,Sheet
Q6060,Q6061,Q6062	2203694 or	*	MP150S-Y or
Q6063,Q6064,Q6065	2203693 or	*	MP150S-O or
Q6066	2203696	*	MP150S-P,Transistor
Q6080,Q6081,Q6082	2203684 or	*	MN150S-Y or
Q6083,Q6084,Q6085	2203683 or	*	MN150S-O or
Q6086	2203686	*	MN150S-P,Transistor
Q6090,Q6091,Q6092	2203694 or	*	MP150S-Y or
Q6093,Q6094,Q6095	2203693	*	MP150S-O
Q6096	2203696	*	MP150S-P
Q9301	222780184JRC		7818FA(NJM7818FA),IC
Q9311	222790184JRC		7818FA(NJM7818FA),IC
Q9322	2202314 or		2SA1726-Y or
	2202313 or		2SA1726-O or
	2202315		2SA1726-P,Transistor
Q9322A	223026		Isolated sheet
Q9322B	223034		MT-25,Transistor accessory
Q9332	2202364 or		2SA1693-Y or
	2202363 or		2SA1693-O or
	2202365		2SA1693-P,Transistor
Q9332A	223024		AC238,Isolated sheet
Q9351	222780565JRC		78M56(NJM78M56FA), IC
Q9392	2202364 or		2SA1693-Y or
	2202363 or		2SA1693-O or
	2202365		2SA1693-P,Transistor <D>
	223024		AC238,Isolated sheet <D>
Q9404A	223026		Isolated sheet
Q9404B	223034		MT-25,Transistor accessory
Q9411	222780054JRC		7805FA(NJM7805FA),IC
Q9421	222790054JRC		7905FA(NJM7905FA),IC
Q9432,Q9442	2202364 or		2SA1693-Y or
	2202363 or		2SA1693-O or
	2202365		2SA1693-P,Transistor
Q9432A,Q9442A	223024		AC238,Isolated sheet
T9001	2301747A	!	NPT-1496D,Power transformer <D/DT>
	2301749A	!	NPT-1496G,Power transformer <GT/R/K>
T9002	2301723	!	NPT-1487D,Power transformer <D/DT>

	2301725	! NPT-1487G,Power transformer <GT/R/K>
U01	1A989537-1A	NAVD-8137-1A,Slot L(HDMI) PC board ass'y
U02	1A989539-1A	NAAR-8139-1A,Pre-amplifier PC board ass'y
U022	1A989540-1A	NAETC-8140-1A,Connector PC board ass'y
U023	1A989541-1A	NADG-8141-1A, PC board ass'y
REF. NO.	PART NO.	DESCRIPTION
U024	1A989542-1A	NAETC-8142-1A, PC board ass'y
U027	1A989505-1A	NAVD-8205-1A,Slot J PC board ass'y
U03	1A989544-1	NAAF-8144-1,Slot F terminal PC board ass'y
U032	1A989545-1	NAAF-8145-1,Slot G terminal PC board ass'y
U033	1A989546-1	NAETC-8146-1,Conector terminal PC board ass'y
U04	1A989548-1A	NAAF-8148-1A,Slot E PC board ass'y
U06	1A989552-1A	NARF-8152-1A,Slot K PC board ass'y <D>
	1A989552-1C	NARF-8152-1C,Slot K PC board ass'y <GT/DT/R/K>
U09	1A989562-1	NADG-8162-1,DIR circuit PC board ass'y
U10	1A989564-1A	NADG-8164-1A,IEEE terminal PC board ass'y
U11	1A989566-1A	NAAR-8166-1A,Mother PC board ass'y
U12	1A989568-1A	NAAF-8168-1A,Driver circuit PC board ass'y <D>
	1A989568-1B	NAAF-8168-1B,Driver circuit PC board ass'y <GT/DT/R/K>
U122	1A989569-1A	NAAF-8169-1A,Power amplifier 4 PC board ass'y <D>
	1A989569-1B	NAAF-8169-1B,Power amplifier 4 PC board ass'y <GT/DT/R/K>
U123	1A989570-1A	NAETC-8170-1A,Thermal detector PC board ass'y <D>
	1A989570-1B	NAETC-8170-1B,Thermal detector PC board ass'y <GT/DT/R/K>
U13	1A989573-1	NAAF-8173-1,Power amplifier 1 PC board ass'y
U132	1A989574-1	NAAF-8174-1,Power amplifier 2 PC board ass'y
U133	1A989575-1	NAAF-8175-1,Power amplifier 3 PC board ass'y
U14	1A989577-1	NAETC-8177-1,Connector PC board 1 for Power amplifier
U142	1A989578-1	NAETC-8178-1,Connector PC board 2 for Power amplifier
U143	1A989579-1	NAETC-8179-1, Power transistor PC board ass'y
U15	1A989581-1A	NAPS-8181-1A,Bias selector PC board ass'y <D>
	1A989581-1B	NAPS-8181-1B,Bias selector PC board ass'y <DT>
	1A989581-1D	NAPS-8181-1D,Bias selector PC board ass'y <R>
	1A989581-1E	NAPS-8181-1E,Bias selector PC board ass'y <GT>
	1A989581-1H	NAPS-8181-1H,Bias selector PC board ass'y <K>
U152	1A989582-1A	NAPS-8182-1A,Regulator circuit PC board ass'y <D>
	1A989582-1B	NAPS-8182-1B,Regulator circuit PC board ass'y <DT>
	1A989582-1D	NAPS-8182-1D,Regulator circuit PC board ass'y <R>
	1A989582-1E	NAPS-8182-1E,Regulator circuit PC board ass'y <GT>
	1A989582-1H	NAPS-8282-1H,Regulator circuit PC board ass'y <K>
U153	1A989583-1A	NAPS-8183-1A,Standby transformer PC board ass'y <D>
	1A989583-1B	NAPS-8183-1B,Standby transformer PC board ass'y <DT>
	1A989583-1D	NAPS-8183-1D,Standby transformer PC board ass'y <R>
	1A989583-1E	NAPS-8183-1E,Standby transformer PC board ass'y <GT>
	1A989583-1H	NAPS-8383-1H,Standby transformer PC board ass'y <K>
U154	1A989584-1A	NAETC-8184-1A,Speaket terminal PC board ass'y <D>
	1A989584-1B	NAETC-8184-1B,Speaket terminal PC board ass'y <DT>
	1A989584-1D	NAETC-8184-1D,Speaket terminal PC board ass'y <R>
	1A989584-1E	NAETC-8184-1E,Speaket terminal PC board ass'y <GT>
	1A989584-1H	NAETC-8184-1H,Speaket terminal PC board ass'y <K>
U156	1A989500-1H	NAETC-8200-1H,AC outlet terminal PC board ass'y <K>
U16	1A989586-1A	NAPS-8186-1A,Power supply circuit PC board ass'y <D>
	1A989586-1B	NAPS-8186-1B,Power supply circuit PC board ass'y <DT>
	1A989586-1D	NAPS-8186-1D,Power supply circuit PC board ass'y <GT/R/K>
U162	1A989587-1A	NAPS-8187-1A,Secondary circuit PC board ass'y <D>
	1A989587-1B	NAPS-8187-1B,Secondary circuit PC board ass'y <DT>
	1A989587-1D	NAPS-8187-1D,Secondary circuit PC board ass'y <GT/R/K>
U163	1A989588-1A	NAPS-8188-1A,Capacitor PC board ass'y <D>
	1A989588-1B	NAPS-8188-1B,Capacitor PC board ass'y <DT>
	1A989588-1D	NAPS-8188-1D,Capacitor PC board ass'y <GT/R/K>
U164	1A989589-1B	NAPS-8189-1B,Power switch PC board ass'y <DT>
	1A989589-1D	NAPS-8189-1D,Power switch PC board ass'y <GT/R/K>
U18	1A989501-1A	NAVD-8201-1A,Slot H PC board ass'y <D>
	1A989501-1B	NAVD-8201-1B,Slot H PC board ass'y <GT/DT/R/K>
U182	1A989502-1A	NAVD-8202-1A,Slot I PC board ass'y <D>

	1A989502-1B	NAVD-8202-1B,Slot I PC board ass'y <GT/DT/R/K>
U183	1A989503-1A	NAETC-8203-1A,Connector PC board ass'y <D>
	1A989503-1B	NAETC-8203-1B,Connector PC board ass'y <GT/DT/R/K>
U20	1A989507-1A	NAVD-8207-1A,PC board ass'y <D>
U23	1A989518-1A	NADIS-8218-1A,Display circuit PC board ass'y
U232	1A989519-1A	NAETC-8219-1A,Standby switch PC board ass'y
REF. NO.	PART NO.	DESCRIPTION
U233	1A989520-1A	NAETC-8220-1A,Operation switch PC board ass'y
U234	1A989521-1A	NAETC-8221-1A,Headphone terminal PC board ass'y
U235	1A989522-1A	NAETC-8222-1A,Front optical PC board ass'y
U236	1A989523-1A	NAETC-8223-1A,Front video PC board ass'y
U237	1A989524-1A	NAETC-8224-1A,Volume PC board ass'y
U238	1A989525-1A	NAETC-8225-1A,Holder PC board ass'y
U239	1A989526-1A	NAETC-8226-1A,Holder PC board ass'y
U24	1A989528-1A	NADG-8228-1A,Net-tune circuit PC board ass'y
U25	1A989577-2	NAETC-8177-2,Connector PC board 3 for Power amplifier
U252	1A989578-2	NAETC-8178-2,Connector PC board 4 for Power amplifier
U26	1A989563-1	NADG-8163-1,PC board ass'y
U30	240135	TFCE1E512A,Tuner unit <GT/DT/R/K>
	240134A	TFCE1U114B,Tuner unit <D>

PACKING VIEW-PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
A11	24140557	RC-557M,Remote controller <GT/DT/R/K>
	24140558	RC-558M,Remote controller <D>
A12	292198	NHB1-00-007(NTSC),FM antenna <D>
	292199	NHB1-00-008(PAL),FM antenna <GT/DT/R/K>
A13	232140	NMA-3057,AM loop antenna
A14	3010054	R6/AA(UM-3),Battery
A15	29363059A	Label,speaker cable
A21	29343668	Instruction manual En
A22	29343675	Instruction manual Ct <GT>
	29343669	Instruction manual Fr <D>
	29343676	Instruction manual Cs <GR>
A23	29343670	Instruction manual Es <D>
A31	29343679	Instruction manual En(Net-Tune QS)
A32	29343682	Instruction manual CtCs(Net-Tune QS) <GT/DT/R>
A37	29343820	Instruction manual U9(Setup Memo)
A39	29343678	Instruction manual,digest <D>
A41	29355489	Instruction sheet, caution
A42	29355510	Instruction sheet EnFrCtCs
A43	29355509	Instruction sheet U9
A51	29100097-1A	350*250,Polybag
A61	29365098A	Warranty card <R>
	29365090B	Warranty card <D>
P01	29092170A	Pad assembly F
P02	29092180A	Pad assembly R
P03	29100035-1	720*1020,Polybag
P04	29100217	t0.1*70*100,Polybag
P05	29110148	W48,Tape PP
P06	29095964	0.515*1350*1500,Sheet
P07	282301	Staple
P08	29110149	Tape, cellophane
P09	29110151	W35,Tape FIXLON
P10	29363673	Label EAN <GT/DT/R/K>
	29363669	Label UPC <D>
P11	29363757	Label, carton <DT>
	29363755	Label, carton <K>
	29363758	Label, carton <R>
	29363756	Label, carton <GT>
P12	29054160	Carton <D>
	29054162	Carton <S>
	29054164	Carton <G>
	29054244	Carton <GT>

P13	29054166	Carton A
P14	29363761	Label UGR <R>
P15	29363256	Label CCC
P9001	253358VOL	! AS-CCC,Power supply cord <R>
	253298KAW	! AS-CEE-3,Power supply cord <GT/K>
	253297KAW	! AS-UC-2,Power supply cord <D/DT>